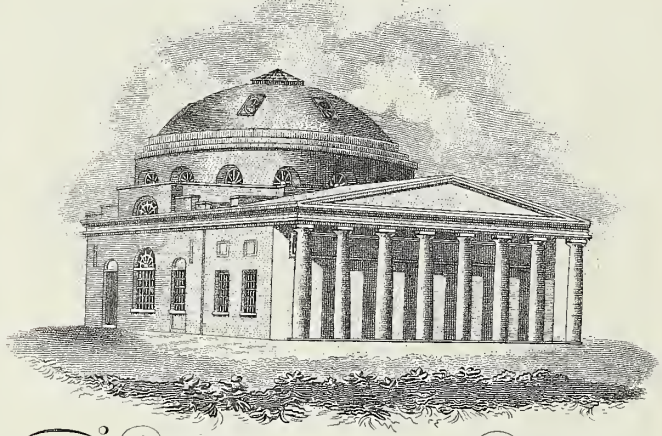
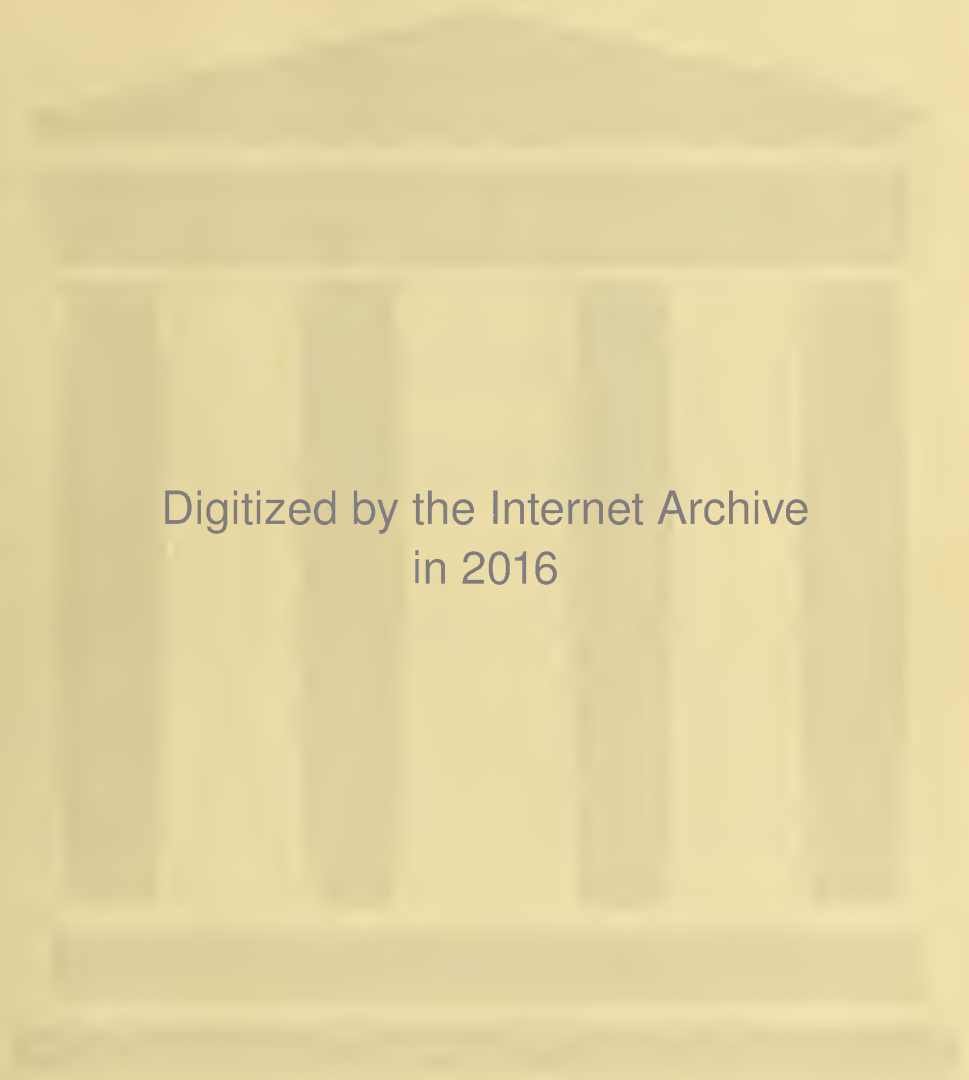
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Table of Contents

MEDICAL YEAR BOOK ARTICLES

The Effect of Taxes on Your Estate Plans. Byron B. Emswiller and Albert Stump, Indianapolis ---- 21
Indiana's Licensed Nursing Homes. Otto F. Walls, Indianapolis ---- 25
Malpractice, Casualty and Fire Insurance ---- 31
Indiana Vocational Rehabilitation. Frank M. Hall, M.D., Indianapolis ---- 32
Counseling and Placement Service of Indiana State Nurses' Association ---- 34
Home Town Medical Care Program of the Veterans Administration. Charles F. Thompson, M.D., Indianapolis ---- 35
Federal Income Tax and the Medical Profession. F. Shirley Wilcox, Indianapolis ---- 36
Group Practice of Medicine ---- 38
The Business Part of the Practice of Medicine 39
Investments and Protection ---- 40
Malpractice and Malpractice Suits ---- 42
Reciprocity Between States Regarding Admission to Practice ---- 42
Laws Pertaining to the State Board of Medical Registration and Examination ---- 43
Regarding the Laws of Adoption ---- 44
Regulation Licensing of Hospitals ---- 44
Tests for Syphilis ---- 45
This Year Book and the 1947 Year Book ---- 46
Indiana Delegation in Congress ---- 46
Officers of the American Medical Association ---- 47
Institutions Operated by the State of Indiana ---- 47
Approved Hospitals and Sanitariums in Indiana 48
Roster of State of Indiana Boards ---- 50
State-Wide Special Medical Organizations ---- 55
Accredited Professional Schools of Nursing in Indiana ---- 56
Officers of State-Wide Organizations ---- 57
List of Presidents of the Indiana State Medical Association Since Its Organization ---- 58
Principles of Medical Ethics of the American Medical Association ---- 59
Constitution and By-Laws of the Indiana State Medical Association ---- 63

EDITORIALS

1948 ---- 71
The Year Book—1948 Edition ---- 71
Those Recommendations ---- 72
Social Hygiene Day, February 4, 1948 ---- 72
Another "Old Timer" ---- 73
The Nursing Situation as of Today ---- 74
Planned Parenthood ---- 74
Editorial Notes ---- 74

SPECIAL ARTICLES

President's Page. Cleon A. Nafe, M.D., Indianapolis ---- 76
Trends in Medicine. Roscoe L. Sensenich, M.D., South Bend ---- 77
Dermato-Syphilology Foundation Memorializes Dr. Alembert Winthrop Brayton ---- 80
Planned Parenthood—The Road to National Health and World Peace. C. O. McCormick, M.D., Indianapolis ---- 81
Medical Panorama. N. K. Forster, M.D., Hammond ---- 88
What's Going on in Indiana. Ray E. Smith, Indianapolis ---- 90
News Notes ---- 94
Deaths ---- 92
Society Reports:
Indiana State Medical Association:
Bureau of Publicity ---- 100
Seventh Councilor District Meeting ---- 100
Local Society Reports ---- 100
Membership Roster
Alphabetically ---- 113
By Counties ---- 129
Woman's Auxiliary ---- 144
National and State Auxiliary Officers ---- 150
New Law Requires Annual Registration of License to Practice the Healing Art ---- 151
Indiana University Medical School ---- 152
Councilor Districts of the Indiana State Medical Association ---- 152
Advertisers' Index ---- 170

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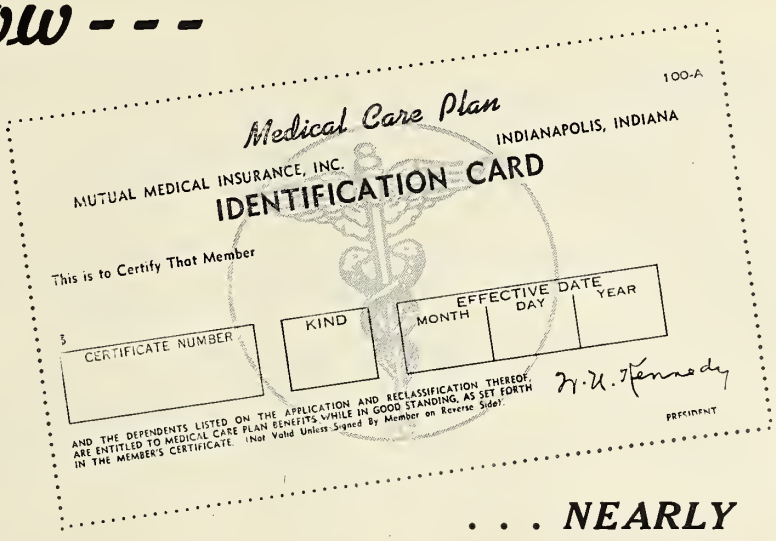
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VOLUME 41 JANUARY, 1948 NUMBER 1

THE EFFECT OF TAXES ON YOUR ESTATE PLANS

BYRON B. EMSWILLER*

AND

ALBERT STUMP†

INDIANAPOLIS

SOME INTRODUCTORY CONSIDERATIONS

ONE of the powerful incentives to work is the desire most people have to provide adequately for their own future and for the future of their dependents. The word "estate" as used in this title would be properly defined as meaning all the unencumbered property of every kind and nature one may have on which he may depend for his own support or on which his family may depend when he is unable to produce any income by his own efforts, or after his death.

To accumulate an estate and have it available for the purposes for which it was accumulated, in general requires some wisdom in handling the money or other property that may come into your hands. One of the important facts that affects plans for acquiring an estate is taxes.

The Indiana Legislature and the United States Congress have passed many revenue laws in the past few years that affect estates. The Supreme Court decisions construing these statutes and determining their validity have generally been in support of the laws and of the construction which would be best calculated to produce revenue. That, after all, was the intent of the lawmakers and is a result which should be expected with regard to any future revenue acts.

It is wise to take advantage of all provisions in tax laws by which their burden can be made as light as possible. Even after plans for an estate have been made which you thought a few years ago were completed forever, it is wise to review those plans from time to time and alter them if the changing facts, with respect to your own family and the changing laws, indicate a change in your plans. It is not unlawful to plan to avoid taxes. To evade or attempt to evade lawful taxes is a violation of the law.

The government is constantly being pressed by various groups to increase the number and the extent of its functions. No matter how hard a struggle is made to keep taxes down, new demands on the government are constantly developing. Control of disease, relief of the needy, provisions for play and recreation, extension and improvement of education, preservation of natural resources—all these and many more such activities are becoming recognized functions of government. They are relied on as a means of preserving values which the public believes are of greater worth in maintaining and advancing our civilization than the money to pay for them would be if it were spent otherwise. This results in a tendency to increase, or at least not decrease very much, the taxes that must be levied in one form or another. But whatever the form, we can be sure that to satisfy these increasing demands will cost money, and that the money must come largely from those who are financially able to pay substantial amounts.

So it behooves any person, in planning for his future, as well as in managing his present business, to take the tax element into consideration in everything relating to his financial affairs. No major financial move should be made without first considering the tax element involved.

* Tax Attorney.

† Counsel for the Indiana State Medical Association.

Tax philosophies change every few years. They follow changing public views and attitudes. Thus income taxes are superseding property taxes—some states totally exempt small homes from all property taxes. Graduated rates are beginning to prevail over level rates so that the more one has with which to pay the higher his rate of taxes will be. Taxation on specially selected commodities and vocations show a growing tendency. As a result, more is collected in many vocations than would be necessary for the policing of the vocation itself, and the funds collected are not placed in the control of the policing agency but are placed in the general fund. So it follows that in making plans for your estate it is well to study not only the present taxes but also to attempt, at least, to anticipate future tax situations.

Some Apparently Static Elements in Taxation

With the exception of a special amendment benefiting war veterans, there has been no significant legislation affecting the Indiana inheritance tax law since 1931, nor the property tax law since about 1921. But the Federal Revenue Acts of 1942 basically changed the federal gift and estate tax laws and there have been great changes made in the federal income tax law. The general principle underlying the federal tax laws has remained practically unchanged since the adoption of the income tax law constitutional amendment on February 25, 1913.

A resident of Indiana, or a non-resident, owning property in Indiana, has six revenue levies of which he should take cognizance in planning his estate. They are:

1. The general property tax,
2. The Indiana gross income tax,
3. The Indiana inheritance tax,
4. The Federal income tax,
5. The Federal gift tax, and
6. The Federal estate tax.

The computation of any of these taxes is simple. The value of the taxable property, or the gross or taxable net income, or the taxable amount of the inheritance or gift, or of the estate, is multiplied by the rate per cent fixed under the particular law involved. The product of this multiplication is the amount of the tax. Therefore, there are only two ways of reducing taxes: first, reduce the value of the property subject to tax, or of the gross or net income subject to tax; or, second, handle both the property and the income in such a manner as to keep the taxes in the lowest possible rate brackets.

The Indiana general property tax is based upon the value of personal property and real estate in Indiana within the various taxing jurisdictions, such as cities, townships, and counties. The taxing officials place a value on real estate, and the taxpayer himself places the value on his personal property—for the purpose of fixing the base values to which the tax rate is applied. About the only thing a taxpayer can do to keep his property taxes low is to seek ownership of property in cities, townships, and counties in good financial condition, where the rate of tax is low.

The Indiana Gross Income Tax

The Indiana gross income tax is a levy on gross receipts without any deductions for costs, expenses, or losses. The law provides for two types of exemptions—one for retail merchants, which is $3,000 per year, and one for all others, which is $1,000 per year. There are three rates of tax: the wholesaler pays ¼ of 1 per cent; the retailer, cleaner and dyer pays ½ of 1 per cent; and all others pay 1 per cent. The professional man is taxed at the rate of 1 per cent on his income from professional services, and there seems no way to avoid any taxes on this source. However, the State of Indiana is prohibited from taxing income received in the form of interest or principal on Federal Government obligations and from taxing income from Interstate Commerce transactions.

In the sale of intangibles it is well to consider the possibility of selling them to residents of other states and shipping the certificates across state lines. In selling real estate the method of handling may save the 1 per cent levy. If property is mortgaged, sell it subject to the mortgage and pay tax only on the income received from the sale of the equity. If the seller pays the mortgage and then sells free and clear of encumbrances, the entire sale price of the property is subject to the tax at the rate of 1 per cent.

The Indiana inheritance tax is levied on the right of heirs to receive property. Varying exemptions are allowed before the rate is applicable. The widow is allowed $15,000; minor child—$5,000; husband or adult child—$2,000, and so on, with the exemption decreasing as the relationship becomes more distant or disappears. The rates begin at 1 per cent and go as high as 20 per cent, the rates increasing as the relationship decreases. Property held as tenants by entirety is exempt, and so is life insurance payable to any named beneficiary other than to the estate. In planning an estate it is well to consider the effect, tax wise, of these two exclusions from the Indiana inheritance tax.

The Federal Taxes

The federal net income tax is a tax on the recipient of net income. There are two ways of reducing this tax. They are: (1) through reducing the taxable income by taking advantage of all exclusions and deductions provided by the law; and, (2) by handling the business in such a manner as to place the income in the lower rate classifications, which may be done by splitting the income among more taxpayers, spreading the income as evenly as

possible over the years, and choosing a form of business structure which takes the lowest rate.

The federal gift tax is a levy on gifts made by one who is living. The law provides for two exemptions, an annual exemption and a general exemption. The annual exemption permits the first $30,000 given to any one donee to be tax free. The amount given to any one donee in excess of $3,000 in a year is subtracted from the general exemption of $30,000. When the general exemption has been consumed, all subsequent gifts in excess of the annual exemption of $3,000 are subject to tax at graduated rates. These rates range from 2¼ per cent to 57¾ per cent.

The federal estate tax is levied upon the right of a decedent to transmit property at death. All property the decedent owned is subject to the tax, including jointly held property and life insurance, regardless of the beneficiary. The law provides for two exemptions and levies, a normal tax and a surtax. The normal tax rates range from 1 per cent to 20 per cent over an exemption of $100,000, and the surtax rates range from 3 per cent to 77 per cent over an exemption of $60,000. The federal estate tax rates are graduated.

An illustration of how the burden of taxation can be materially reduced is now presented.

John Doe, a physician, is 50 years of age; his wife, Mary, is 47; and he has two children, aged 14 and 16. His income from his profession is $10,000 a year, and he has the following property:

	Value	*Yield*
Residence	$15,000	----
Common Stock	10,000	$400
Corporate Bonds (long term)	20,000	575
Bank Accounts	3,500	25
Insurance, payable to wife	20,000	----
Government Bonds	5,000	150
Farm	26,500	1,500
Total	$100,000	$2,650

By his present will John leaves his wife, Mary, the residence and the farm; and to his two children he leaves the balance of his estate. Since Mary is the beneficiary of his life insurance, if John should die today, his children would inherit about $30,000. The expenses and estate taxes, at a low estimate, and without litigation or large hospital bills or costly funeral expenses, may be assumed to be as follows:

Gross estate	$100,000	
Allowable claims against estate, including hospital, medical, funeral, executor's fee, attorney's fee, and other administrative expenses	8,000	
Net estate		$92,000

The entire federal estate and Indiana inheritance tax would be as follows:

Federal estate tax	$18,460	
State inheritance tax	495	
		$18,955
Value of estate to family		$73,045

Since John's children will receive approximately $30,000, why not set up a trust for these children, transferring his stocks and bonds to a trustee for them? If this transfer were made, taking all rights and powers away from John, and the transfer was not made in contemplation of his death, his estate would work out as follows:

	Value	*Yield*
Residence	$15,000	----
Bank Accounts	3,500	$25
Insurance (payable to wife)	20,000	----
Government Bonds	5,000	150
Farm	26,500	1,500
Total	$70,000	$1,675
Gross estate	$70,000	
Allowable claims against estate, including hospital, medical, funeral, executor's fee and attorney's fee, and other administrative expenses	7,000	
Net estate		$63,000
Federal estate tax	$10,340	
Indiana inheritance tax	295	
		10,635
		$52,365
Children's trust		30,000
Value of entire estate to family under this plan		82,365
Value of estate to family under first plan		73,045
Increased benefit to children by this plan over first plan		$9,320

It will be noted that when the size of the estate is reduced there was a reduction also in the amount of the allowable claims. This comes from a reduction in the amount regularly allowed by the court for administration expenses. The amount of such expenses is reduced with the reduction of the value of the estate to be administered.

The increase in tax saving through following some such plan as illustrated increases with the increase in the size of the estate, because of the fact that the estate tax rate is graduated and increases as the size of the estate increases. So the increase in tax saving is greater than the mere arithmetic progression as the estate increases in value.

The creation of a trust in the illustrated case of $15,000 for each child would not involve the gift tax at all. Or if John Doe gave not more than

$3,000 in any one year to each of his two children and to his wife, he could have made such gifts over an unlimited number of years without paying any tax or even reporting the gifts. If he gave gifts of more than $3,000 in any one year to any one person, such gifts would be reportable and he could give reportable gifts to a maximum of $30,000 before any gift tax would be levied.

The illustrative case proceeds on the theory that John Doe would handle his affairs in such a manner as to leave an estate at his death of more than $60,000. If he had gone far enough in distributing his income and his estate during his lifetime, it would have been very simple to accomplish a result that would leave him $60,000, with the rest of the estate in the hands of his widow and children before his death, in which event his estate would have paid no estate or gift taxes and very little inheritance tax. Suppose a man's estate is $500,000. The estate tax in that event would be over $100,000, all of which could be avoided if the distribution of the estate began early enough and were made in correct amounts to enough people for whom he might want to make some provision anyhow.

In addition to the economic advantages that may be obtained through a consciousness of taxes in planning an estate, the occurrence of certain events may indicate a change in existing plans. To illustrate—

1. A child may be born to the testator after the will was made, which event will revoke the entire will and leave the person without a will.

2. The testator, if unmarried, may marry, and the effect will also be to revoke any will made before the marriage.

3. A divorce may occur, which of itself does not revoke a will, although the language of the will may be such as to revoke the specific bequest to the divorced spouse, and the testator may desire to change the disposition of the property as provided for in the will.

4. The testator may change his interest in real estate, the effect of which may be to revoke a particular bequest.

5. Specific property may be given to a beneficiary, which may involve legal difficulties because of the language in the will.

These illustrations are sufficient to indicate that any change in the family should be an occasion to give consideration to the final disposition of one's estate.

Conclusion

Taxation has become a matter of so many complications and of such importance to all who have either an income or an estate, no matter how small or how large, that the handling of it has become a profession. It is practically impossible for one who has not given special time and attention to the study of the problems in the field of taxation to solve his own tax problems without the assistance of one who has made taxation a subject of a professional interest. The text matter stating the law is voluminous. The rulings of administrative boards run into the thousands. The decisions of courts run into the hundreds. Only by keeping in contact with all this material, through the digests and reports that stream in, can one keep abreast with the laws of taxation. It is therefore the part of wisdom to call in a competent professional counsellor whom you know and in whom you have confidence, to help with your tax and estate problems.

PRESERVE THIS ISSUE OF THE JOURNAL

You will find the contents of this issue of THE JOURNAL useful throughout the year, so it is recommended that you keep this copy on your desk. The roster of members of the Indiana State Medical Association is printed both alphabetically and by county societies. A roster of the Woman's Auxiliary, by counties, is also carried. In this number, too, are listed personnel of state boards and commissions, officers of various special organizations, explanations of laws affecting medical practice, and much other helpful information. Another "Indiana Medical Year Book" edition of THE JOURNAL will be put out in January, 1949. Meantime, the editors will welcome suggestions as to its contents.

INDIANA'S LICENSED NURSING HOMES

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INDIANAPOLIS

THE *Nursing Home Licensing Act of 1947* provides for the first time a clear cut and enforceable law which assures minimum standards and regulations for private for-profit nursing homes operating in the state.

Nursing homes, though a comparatively new development, are probably a permanent part of our future scene. With the constant overcrowding, the rising costs, and the increasing specialization of hospital care on the one hand, and on the other hand the decreasing ability of the average family to take care of its sick or disabled members at home, there develops a growing need for facilities for chronically ill, convalescent, infirm, and subacute patients. Our increasing length of life brings about greater probability of necessity for nursing or at least shelter care for the individual chronically ill and infirmly old. The nursing homes have stepped into this gap, and with the support of physicians, welfare and health agencies, and the general community, I believe they can competently fill at least part of the need.

We have long had nursing homes in Indiana. Prior to 1936, however, there were comparatively few. Those which existed were usually operated by retired or practical nurses who took into their homes a few patients and gave them care. They were so scattered and the total number of patients cared for so small that there was little need for regulation. The private for-profit nursing homes began to develop on a much wider scale in 1936 when Indiana's public assistance programs of aid to the dependent aged and aid to the dependent blind went into effect. The federal government, which participates in the financing of public assistance programs, specifically states in its legislation that recipients cannot reside in public institutions at the time of receiving assistance. This clause eliminated the county homes which had previously borne most of the brunt in providing shelter care for the dependent aged. As many recipients were chronically ill or in various stages of infirmity, and often lacked home or family facilities for care, and could not reside in the county homes unless forfeiting rights to assistance, which few of them chose to do, there developed the new need for congregate housing and general services. Most of the recipients going into the earlier nursing homes were ambulatory and needed only boarding homes with protective care to meet various personal needs. As the months passed, however, it was found that patients requiring more or less nursing care were entering the homes. They often had private means, so were in a position to pay higher rates than recipients of public assistance. As hospital facilities became overcrowded and costlier, as family home facilities became more limited, and as family members became more likely to have committed their time to out-of-the-home responsibilities, added impetus was given to the nursing home movement. The number of nursing homes increased rapidly. The demands for their services were great, and since there was no law prohibiting them from opening, trained and untrained persons saw what they believed to be opportunities to make money, and opened homes without consulting anyone as to their plans. Most of the nursing homes gave at least fair services, but others failed almost entirely, due, in most cases, to lack of experience, training, and financial stability. The main difficulty lay in the needs of the patients, which so many operators were completely unequipped to handle, either in facilities, or in knowledge and experience, or in personnel. As time went on, an even higher proportion of the patients were in need of bedside attention and medical care, out of which developed problematical situations which were in many cases quite beyond the abilities of the operators and their limited and frequently untrained staffs.

The war years were a difficult period, both for nursing home operators and for persons who needed care. Rising costs and difficulties in obtaining personnel multiplied administrative difficulties of the operators. Many patients had no relatives. The relatives of other patients were so glad to find places which relieved them of personal care that they said very little about the services offered and given. General hospital and nursing facilities were so limited in relation to the need that many accepted gratefully those which they could find. As a result, there was little demand for acceptable standards.

The only legal provision for public control of nursing homes was in the brief section of the Welfare Act of 1936, which gave the State Department of Public Welfare inspection responsibility for privately owned and operated homes for aged people. This law carried with it little authority, so the department was powerless to enforce standards or to act against abuses.

Persons who were aware of conditions in the homes tried to arouse public sentiment. The activity of a few groups, including the clubwomen of the state, and exposure by the press of conditions, led to the 1943 law for the licensing and regulation of nursing homes. This law, one of the first

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in any of the states to attempt the regulation of nursing homes, placed administration under the State Board of Health. The State Board of Health retained jurisdiction until 1945, when the legislature transferred all duties and powers to the State Department of Public Welfare.

Standards were developed under the 1943 and 1945 laws, and a number of homes were licensed; however, a great many continued to operate without licenses. In the summer of 1946 action was instigated against one home which was not only unlicensed but charged with flagrant abuses, and the court in jurisdiction over the action declared the law unconstitutional due to uncertainty of the language in the title and the language of the act. Though this was not taken to a higher court for decision, it produced an immediately urgent need for a new law to regulate and control private nursing homes. The public press gave wide publicity to the matter, and many medical, welfare, and lay organizations actively worked toward a new and better law for introduction and passage in the next legislature. A special study commission appointed by the governor made recommendations that were closely followed in the writing of the new bill, which was introduced early in the 1947 session. The draft bill was cleared with the legislative committee of the Indiana State Nurses Association, the Indiana Association of Licensed Nursing Homes, the State Board of Health, the State Fire Marshal, the Administrative Building Council, and the State Department of Public Welfare.

The *Nursing Home Licensing Act of 1947* completely re-wrote the nursing home licensing law, provided for the development, establishment, and *enforcement* of standards, placed licensing authority with the State Department of Public Welfare, and created the Indiana Nursing Home Advisory Council to consult and advise with the licensing agencies and to review and make recommendations with respect to rules, regulations, and standards. While the State Department of Public Welfare is designated as the licensing agency, the law requires the State Fire Marshal and the State Board of Health to make recommendations and give final approval of fire and sanitary conditions. The act declared an emergency and was made effective on and after May 1, 1947, and applies to all homes operating with three or more persons receiving boarding and/or nursing care. Prior experience under the old acts was utilized in writing the new act, and prior experience was utilized in writing the rules and regulations.

The Nursing Home Advisory Council is composed of the following members: the administrator of the State Department of Public Welfare, as chairman, the secretary of the State Board of Health, the State Fire Marshal, the director of the Indiana Council for Mental Health, and such other ex-officio members as the governor may determine to be advisable. It meets twice a year, and oftener when necessary. Its function is much the same in relation to nursing homes as that of the Hospital Regulating and Licensing Council in relation to hospitals.

The *Nursing Home Licensing Act of 1947* provides for rules and regulations for the setting of standards for use in granting or denying licenses. It is generally impractical to establish specific standards, particularly standards of professional competence, by legislative enactment. Rules and regulations for the licensing of nursing homes set forth more detailed provisions which will, if followed, safeguard "the health, safety, welfare and comfort of inmates," yet they are sufficiently flexible and subject to discretionary judgment so that they will not be unworkable or unfair in application. The rules and regulations for the licensing of nursing homes were prepared by the State Department of Public Welfare and the Indiana Nursing Home Advisory Council, a public hearing was held on them as is always done on administrative rules and regulations, and they became effective on August 26, 1947. It is more than probable that experience will show the need for some change in the standards as they are now set up. When this occurs, the rules and regulations will be revised. The advice and counsel of physicians is earnestly solicited for the purpose of making such future revisions as may be necessary or advisable.

Too long to list here in their entirety, the rules and regulations cover the following points: License, Personnel, Health, Water Supply, Housing, Food, Sewage Disposal, Inspection, Drug Handling, Safety Standards, Records, Exceptions and Variations. Copies of both the law and complete rules and regulations will be mailed to doctors on request. The following excerpts seem to bear sufficient interest to all physicians to justify space in the present article.

In paragraph "a," Section 1, Chapter 172, Acts of 1947, we find the following:

> "The term 'nursing home' shall include, but not in limitation thereof, homes for the aged, infirm or chronically ill, boarding homes and convalescent homes. The term 'nursing home' shall not include institutions operated by the federal or state government or any municipal corporation, hospitals, institutions for the treatment and care of psychiatric patients, boarding homes for children, day nurseries, child caring institutions, children's homes and child placing agencies, as defined under the laws of this state, nor hotels and/or offices of physicians."

Under paragraph "b" of the same section is found the definition of a "patient":

> "The term 'patient' means and shall be construed to include all inmates and individuals kept, cared for, treated, boarded or otherwise accommodated in any nursing home and shall include, but not in limitation thereof, the aged, sick, infirm, convalescent, invalid, feeble-minded, mentally ill, incompetent, decrepit, blind, deaf,

disabled, injured, infected, chronically ill, drug addicted, dipsomaniacal and/or inebriated."

Under Rules and Regulations 6-103, paragraphs "a," "b," and "c," on the relationship of the nursing home operator and personnel with the physician:

"Each operator of a nursing home shall obtain a statement from a physician on the health condition of a patient before such patient is admitted, provided that if such a statement is not available at the time of admission, the nursing home operator shall cause any necessary examination to be made of the health condition of the patient.

"Each operator of a nursing home shall provide promptly medical or nursing care whenever required for any patient, and should a patient become acutely ill or show a sudden change for the worse, the next of kin, person responsible for the care and maintenance of the patient, or other designated person shall be notified at once.

"Any specific order given by a physician for the treatment or care of any patient shall be reduced to writing, and no treatment shall be rendered patients except upon the order of a physician."

Paragraph "d" of the same section conveys advice about restraint and seclusion such as is well known to physicians.

The law leaves the matter of personnel, like other standards for nursing homes, to the discretion of rules and regulations. It has been deemed impractical at this time to demand the employment of registered nurses, though many homes do have registered nurses on their staffs. Regulation 6-102 (Personnel) requires, other than routine health specifications and segregation of children living within the home, the following:

"(a) Each nursing home shall have sufficient employees present at all times for the adequate care of patients and maintenance of the nursing home. Each employee or person in charge of the care of the patients shall be qualified to give the necessary care and shall have had experience in the care and handling of sick people. There shall be sufficient employees to keep the nursing home.

. . .

"(b) Any person employed by a nursing home operator shall have had sufficient experience to qualify him to perform the type of work for which he has been employed. A record shall be maintained on each employee, setting forth education, training and experience, and such record shall be on file in the office of the nursing home."

Careful inspections have been made by the State Department of Public Welfare of all nursing homes which have signified a desire for a license. More than one hundred licenses have been granted to this date. (The State Department of Public Welfare has supplied the Association with a list of licensed homes, see page 28.) The license is issued for a yearly period, though on cause may be revoked or suspended before termination of the licensing period.

There are numerous unlicensed homes throughout the state and homes for which licenses are pending. As soon as the backlog of work entailed by the new law can be assimilated and as soon as we have interpretation of legal procedure under the new law, some action will be taken against those homes which persist in operating illegally. There are homes, however, which, despite the fact that they have thus far been unable to meet licensing standards, are giving fairly satisfactory care to patients. Their difficulty lies usually in inability to meet mechanical requirements. When it is felt that the patients in such homes are receiving good and adequate care, every leniency and aid possible is extended to help them meet licensing standards.

The licensing of nursing homes under the 1947 law has progressed very satisfactorily. More homes have already met the standards necessary for licensing than ever before even applied for licenses. The support of various professional and lay groups and the nursing home operators themselves have contributed largely toward the successful operation of the law. The Indiana Association of Licensed Nursing Homes was organized in 1945, and has done much toward raising the standards of nursing homes and educating its members. On last November 9 they declared a four-hour "open house," so that residents of their communities might see and understand their services.

The law requires the nursing home's license to be posted in a conspicuous place in the home. If a physician finds it necessary to obtain additional information about a particular home or nursing homes in general, such information can always be procured by him from the State Department of Public Welfare or through the various county departments of public welfare.

The nursing home is obviously not a hospital, but it is equally obvious that in planning present-day medical care for the individuals of a community, nursing home services must be considered. It is quite likely that in view of present developments they will have to be considered much more in the future than in the past. I regret that the development of nursing homes in this area has largely come about during a period in which many physicians were in the armed forces and those in civilian practice were so overworked as to be unable to participate in their direction.

A physician's responsibility toward his patients gives him not only the right but the responsibility to familiarize himself with available nursing home facilities in his community, and to require proper services from nursing homes. The doctor also has

a responsibility toward his patient, in that it is usually he who recommends facilities for care in relation to the patient's need and his economic condition. He also maintains responsibility for continuing interpretation of the patient's physical and mental condition. His contacts and instructions with the operators and nurses should be clear and definite. It should be remembered that in view of the amount charged for services, some of the more highly competent professional services cannot be expected. Despite this generalization, however, many of the nursing homes maintain records and other services which compare favorably with those of a small hospital; it seems reasonable to predict that within the future we may expect among all nursing homes even more highly developed professional services. The physician should be clear in his own mind on what can reasonably be expected of nursing homes, and demand such facilities and services for his patients. His insistence on proper standards will have far-reaching good effects.

The physician's contact with a nursing home is frequently more revealing than the inspector's routine visit can be, and by his professional knowledge and experience with the services required for sick persons he can often form opinions and make suggestions in relation to nursing homes. Any such help which the physicians of Indiana can give to the licensing agents of the Department of Public Welfare will be given full consideration.

The physician also has an interpretive responsibility, both in relation to his patient and the facilities which he recommends. Though convalescent and subacute cases are frequent patients in nursing homes, the majority of patients are chronically ill and infirm older people, who manifest all the quirks of old age, intensified by their illness and infirmities; they are persons living from day to day, with little brightness to relieve the drab routine, and with the certain knowledge that the final curtain soon will ring down for them. These patients pose a distinct problem, not only in terms of medical care but in the patient's mental and emotional outlook, and the effects of his illness on relatives. The physician frequently has to interpret the patient's illness and its emotional components to relatives and to the patient himself, and help the operator and staff of the nursing home to deal with the specific problems presented by the patient. The nursing home staff may present a slightly different problem to the physician than he is accustomed to. The nursing home staff may lack the specialized training and experience and the discipline of the hospital staff, and does not have that close personal interest in the patient which usually exists when the older person is being cared for by members of his own family.

It is hoped that another 1947 law, which permits public assistance recipients to purchase their own care for emergency periods in county homes which meet certain requirements, will somewhat relieve the present situation. The county homes, by adding some nursing facilities, will be able to take care of many of the patients whose support is paid out of public funds, thus relieving the present strain on acceptable nursing home facilities which are available at reasonable rates.

The Indiana State Department of Public Welfare intends, through its licensing authority, to see to it that both those patients paying their own way and those supported through public funds are assured necessary standards of care when using the services of private nursing homes. We are anxious to co-operate in any way possible with physicians and other groups who are interested in the same objectives.

Following is a list of private nursing homes licensed by the State Department of Public Welfare, as of December 1, 1947:

Allen County

Colonial Nursing Home
802 W. Berry St., Fort Wayne
Miss Inez Gross, R. N.
License Expires 4-11-48

Grace Convalescent Home
1529 California Ave., Fort Wayne
Mrs. Jessie G. Richer
License Expires 4-30-48

Yerrick Home for Men
516 W. 3rd St., Fort Wayne
Mrs. Gladys Yerrick
License Expires 8-7-48

Bartholomew County

Brown Nursing Home
Box 135, Smith St., East Columbus
Mr. Ithamer Brown
License Expires 9-29-48

Boone County

Himes Nursing Home
310 E. Pearl St., Lebanon
Mr. Charles E. Himes
License Expires 3-29-48

Schwinn Nursing Home
214 S. Pearl St., Thorntown
Mrs. Pansy Schwinn
License Expires 3-29-48

Trammel Nursing Home
415 N. Clark, Lebanon
Mrs. Sarah Trammel
License Expires 6-2-48

Carroll County

The Arzula Flora Nursing Home
312 W. Main St., Flora
Miss Ida Arzula Flora
License Expires 1-7-48

Cass County

Justice Home for the Aged
227 Cliff Drive, Logansport
Mr. and Mrs. Martin Justice
License Expires 1-10-48

Rest Haven Nursing Home
731 North St., Logansport
Miss Olive S. Jones
License Expires 4-1-48

Clark County

Keller Home
403 E. 7th St., Jeffersonville
Mrs. Florence Keller
License Expires 5-11-48

Clay County

Garvin Nursing Home
827 S. Franklin St., Brazil
Mrs. James Garvin
License Expires 5-12-48

Clinton County

Colfax Nursing Home
Box 826, Main St., Colfax
Mrs. Marguerite H. Waggoner
License Expires 6-10-48

Daviess County

Canary Home
209 N. E. Tenth St., Washington
Mrs. Lenna Canary
License Expires 3-10-48

Delaware County

Sylvester Nursing Home
319 S. Hutchinson Ave., Muncie
Mrs. Nellie V. Sylvester
License Expires 4-1-48

Williams Nursing Home
1525 S. Monroe St., Muncie
Mrs. Rena Williams
License Expires 9-19-48

Woodland Home
917 E. Main St., Muncie
Mrs. Hazel Wilson, R. N.
License Expires 8-28-48

Elkhart County

The Austin Home
526 N. 6th St., Goshen
Fred S. Austin
License Expires 12-2-47

Hope Convalescent Home
Bristol
Mrs. Bernice Alverson
License Expires 3-29-48

Lockerbie Nursing Home
302 E. Lincoln Ave., Goshen
Mrs. Bertha J. K. Lockerbie
License Expires 5-16-48

Schieber Convalescent Home
R. R. 2, Bristol
Mrs. Lulu Schieber
License Expires 8-13-48

Floyd County

Griggs Nursing Home
710 E. Main St., New Albany
Mrs. Mary C. Griggs
License Expires 4-1-48

Franklin County

Brookside Nursing Home
R. R. 5, Brookville
Mrs. Ida Ruth Beach
License Expires 11-21-48

Resthaven, Reifel's Nursing Home
1015 Franklin Ave., Brookville
Mrs. Elizabeth A. Reifel
License Expires 6-26-48

Gibson County

Church Nursing Home
417 W. Broadway, Princeton
Mrs. Edra E. Church
License Expires 3-29-48

Grant County

Josephine Hill Nursing Home
1524 S. Washington St., Marion
Mrs. Josephine Hill
License Expires 8-7-48

Hancock County

Haney's Nursing Home
114 E. North St., Greenfield
Mr. and Mrs. Ila Haney
License Expires 5-21-48

Howard County

Flossie Coop Nursing Home
1049 S. Webster St., Kokomo
Mrs. Flossie Coop
License Expires 9-19-48

Huntington County

Davis Nursing Home
207 Frederick St., Huntington
Mrs. Nettie Davis,
License Expires 4-1-48

Oak Park Nursing Home
R. R. 2, Roanoke
Mrs. Fern Martin
License Expires 6-3-48

Sears Nursing Home
325 S. Jefferson St., Huntington
Mrs. Ethel K. Sears
License Expires 11-26-48

Johnson County

Catlett Nursing Home
898 Park Ave., Franklin
Mrs. Ina Catlett
License Expires 4-16-48

Johnson Nursing Home
651 S. State St., Franklin
Mrs. Janie Johnson
License Expires 11-21-48

Kosciusko County

Alfran Nursing Home
R. R. 1, Pierceton
Mrs. Alice M. Wilson, R. N.
License Expires 3-29-48

LaGrange County

Stowe Home for the Aged
412 N. Walnut St., LaGrange
Mrs. Hattie B. Stowe
License Expires 4-1-48

Lake County

Laura Beaton Nursing Home
521 Pennsylvania St., Gary
Mrs. Laura Beaton
License Expires 3-29-48

Green's Home for Aged
3960 Massachusetts St., Gary
Mrs. Lillian Green
License Expires 6-13-48

Hill Top Home
R. R. 2, Crown Point
Mrs. Olive Beggs
License Expires 5-29-48

The Neff Memorial Nursing Home
10th and Fleming, Hobart
Mrs. Eleanor Stuart
License Expires 5-2-48

Sanders Nursing Home
1944 Maryland St., Gary
Mrs. LaGora Sanders
License Expires 4-2-48

Madison County

Antonidis Nursing Home
2417 Pearl St., Anderson
Mrs. Clara S. Antonidis
License Expires 4-11-48

Delph Nursing Home
1719 Morton St., Anderson
Mrs. Alta V. Delph
License Expires 11-21-48

Rahbek Nursing Home
1102 E. Sixth St., Anderson
Mrs. Marie L. Rahbek Warner
License Expires 4-1-48

Marion County

Albrecht's Convalescent Home
1814 N. New Jersey St., Indianapolis
Mrs. Gertrude Keller Albrecht, R. N.
License Expires 1-27-48

Anselm Nursing Home
1427 N. Delaware St., Indianapolis
Mrs. Ada Anselm
License Expires 3-29-48

Conde Nursing Home
624 E. 12th St., Indianapolis
Mrs. Mollie Bunnell
License Expires 10-16-48

Francis Nursing Home
603 N. Jefferson St., Indianapolis
Mrs. Mattie B. Francis
License Expires 7-24-48

Gifford Nursing Home
1336 N. Delaware St., Indianapolis
Mrs. Mary J. Messer
License Expires 12-1-48

Huff's Sanitarium
115 S. Audubon Rd., Indianapolis
Mrs. Gertrude Huff
License Expires 3-29-48

Irvington Sanitarium
R. R. 10, Box 320, Indianapolis
Mrs. Minnie Waymire Cross
License Expires 6-3-48

Myrtle Lee Nursing Home
1429 Carrollton Ave., Indianapolis
Miss Mabel Cecelia Smalley
License Expires 5-16-48

Lynhurst Nursing Home
5225 W. Morris St., Indianapolis
Thomas E. and Barbaraella K. Brown
License Expires 3-29-48

Olympia Nursing Home
6879 E. Washington St., Indianapolis
Mrs. Frances Limpus
License Expires 6-25-48

Rest Haven Sanitarium
3245 N. Illinois St., Indianapolis
Mrs. Carolyn E. Carden
License Expires 4-4-48

Robinson's Sanitarium
2254 Central Ave., Indianapolis
Mrs. Eunice C. Robinson
License Expires 4-1-48

The Roethig Home
350 Villa Ave., Indianapolis
Mrs. Anna Roethig
License Expires 4-1-48

Rose Lawn Home
2835 N. Meridian St., Indianapolis
Mrs. Lucy V. Conner
License Expires 3-29-48

Stein Nursing Home
5631 Broadway, Indianapolis
Mrs. Lorattie Stein
License Expires 4-9-48

Suddarth Nursing Home
1445 Broadway, Indianapolis
Mrs. Cleo Suddarth
License Expires 4-30-48

Vollmer Convalescent Home
2630 College Ave., Indianapolis
Emory H. Vollmer
License Expires 4-1-48

Mrs. Waddle's Private Home
2112 N. Delaware St.,
Indianapolis
Mrs. Mabel S. Waddle
License Expires 7-31-48

Florence Wagner Sanitarium
2021 N. Meridian St., Indianapolis
Mrs. Florence Wagner
License Expires 6-3-48

Ward Nursing Home (Colored)
1518 N. Senate Ave., Indianapolis
Mrs. Willa Mae Murray
License Expires 5-19-48

Warman Avenue Rest Home
46 S. Warman Ave., Indianapolis
Mrs. Mary Elizabeth Frame
License Expires 8-23-48
(*Provisional*)

Weber Convalescent Home
43 S. Ritter Ave., Indianapolis
Mrs. Laura E. Weber
License Expires 4-23-48

West Park Home
373 N. Holmes Ave., Indianapolis
Mrs. Mary R. Frame
License Expires 3-29-48

Wildwood Restorium
895 M. D., Woodruff Place,
Indianapolis
Mrs. Nellie Wildman
License Expires 4-25-48

Marshall County

Austin Nursing Home
821 Angell St., Plymouth
Mrs. Mabel M. Austin
License Expires 6-10-48

Morris Home
347 Pennsylvania Ave., Plymouth
Miss Bertha Mohr
License Expires 3-29-48

Miami County

Glen Rest Convalescent Home
R. R. 4, Peru
Mrs. Thelma Strothers
Woeckener
License Expires 6-18-48

Peru Nursing Home
906 W. Main St., Peru
Mrs. Marie A. Donat
License Expires 8-7-48

Monroe County

Hazel's Nursing Home
406 E. 6th St., Bloomington
Mrs. Ona B. Hazel
License Expires 1-7-48

Wilkins Nursing Home
601 N. Walnut Grove,
Bloomington
Mrs. Orpha A. Wilkins
License Expires 3-29-48

Wilkins Nursing Home
1023 E. 10th St., Bloomington
Mrs. Orpha A. Wilkins
License Expires 3-29-48

Noble County

Truelove Convalescent Home
208 W. Grove St., Kendallville
Mrs. Alta Truelove
License Expires 7-12-48

Orange County

Billings Invalids Home
202 College St., French Lick
Mrs. Flora Billings
License Expires 4-4-48

Pike County

Fay's Convalescent Home
210 S. 14th St., Petersburg
Mrs. Fay France
License Expires 2-28-48

Porter County

Woods Home
R. R. 2, Michigan City
Mrs. Helen O. Wood, R. N.
License Expires 8-9-48

Putnam County

Westfall Nursing Home
218 Bloomington St.,
Greencastle
Mrs. Nina A. Westfall
License Expires 9-29-48

Rush County

Clifton Nursing Home
204 W. 3rd St., Rushville
Mrs. Mary Clifton
License Expires 9-29-48

Shelby County

The Maples
R. R. 1, Fountaintown
Mrs. Lelah M. McGraw
License Expires 10-23-48
(*Provisional*)

Spencer County

Mayhall Nursing Home
417 S. 6th St., Rockport
Mrs. Alice Mayhall
License Expires 3-29-48

Starke County

Ruff Nursing Home
West John St., Knox
Mrs. Alcinda Ruff
License Expires 8-7-48

St. Joseph County

Jones Nursing Home
702 S. Columbia St., South Bend
Mrs. Vera Jones
License Expires 8-6-48

Kintz Rest Home
1527 South Bend Ave., South Bend
Mrs. Edith Kintz
License Expires 3-29-48

Krogh Nursing Home
109 N. Cedar St., Mishawaka
Miss Bernalda I. Krogh
License Expires 4-1-48

Williams Nursing Home
601 N. Main St., South Bend
Mrs. Alma Williams
License Expires 4-16-48

Tippecanoe County

Scott Nursing Home
1100 N. 9th St., Lafayette
Mrs. Goldie Scott
License Expires 11-26-48

Vanderburgh County

Bethany Rest Home
316 N. Wabash Ave., Evansville
Mrs. Edith Poole and Miss Rola Clayton
License Expires 4-14-48

Comfort Rest Home
807 S. E. 3rd St., Evansville
Mrs. Ethel B. Drake
License Expires 3-10-48

Floyd's Boarding House
200-202 W. Illinois St., Evansville
Mrs. Laura Floyd
License Expires 3-7-48

Jarrett's Nursing Home
605 Oakley St., Evansville
Mrs. Lena K. Jarrett
License Expires 6-30-48

M. & R. Nursing Home
1207 Judson St., Evansville
Mrs. Muriel Adverl Beumer
License Expires 4-7-48

Singleton Nursing Home
909 First Ave., Evansville
Mrs. Fern Singleton
License Expires 4-4-48

Ingle Smith Home
521 S. E. 1st St., Evansville
Mrs. Della Ingle Smith, R. N.
License Expires 6-26-48

Taylor Nursing Home
915 W. Bond St., Evansville
Mrs. Juanita Taylor
License Expires 5-16-48

Warnholz Rest Home
315 S. E. 2nd St., Evansville
Mrs. Fern J. Warnholz
License Expires 4-2-48

Vigo County

Gano Nursing Home
501 N. 4th St., Terre Haute
Mrs. Anna Gano
License Expires 4-1-48

Kesler's Nursing Home
724 N. 8th St., Terre Haute
Mrs. Clara A. Kesler
License Expires 8-14-48

Wabash County

Moss Nursing Home
855 Ferry St., Wabash
Mrs. Irene Moss
License Expires 8-28-48

Wayne County

Grey Gables
R. R. 1, Centerville
Mrs. Hazel C. Wadie
License Expires 6-30-48

MALPRACTICE, CASUALTY AND FIRE INSURANCE

LITTLE need be said in support of the general principle of insurance. It has generally been accepted as the means by which to spread out or in some way weaken the effect of an event which might otherwise be a catastrophe. It operates upon as close a mathematical computation of the theory of chances as actuaries can make. The burden of the unfortunate event is spread, not only as to the time over which preparation to meet the event is made, but also as to the number of people who help to bear it. All the insured in any one company constitute the group who helps bear the burden to the extent fixed in the policy of the event insured against.

Malpractice insurance should be in amounts large enough to cover the risks involved. Juries' verdicts are tending to grow larger. The increase in the amount of the premium is slight as compared to the increase in the extent of the coverage. Within the past few years verdicts ranging from $5,000 to $15,000 have been returned by juries. But the number of verdicts is small. By reason of the low number of verdicts obtained, high amounts of coverage can be had at a relatively small cost.

Casualty insurance is insurance against accidents, except, as used in this article, fire, windstorm, and other such occurrences destructive to property, and also except malpractice. Casualty insurance covers liability for personal injuries by automobile, by live stock, by conditions of the premises, and by anything else through which liability to others may arise on the part of the insured or through which the insured may suffer loss himself—through events in the nature of accidents.

Casualty insurance can be had covering accidents on one's property or premises or in and about his office, or with respect to his own conduct so long as it is not criminal.

This JOURNAL has already carried an article regarding disability insurance. It was published in the November, 1947, issue.

Compensation insurance was discussed under the title "Workmen's Compensation Act" in the 1947 Year Book.

INDIANA VOCATIONAL REHABILITATION

Its Organization, Scope, and Services

Frank M. Hall, M.D.*

INDIANAPOLIS

VOCATIONAL rehabilitation was established in Indiana by the 1921 General Assembly's enactment of the Acceptance Act. Several revisions have broadened the scope of the original act. However, the primary objective of the program is to provide one or more of a number of rehabilitation services which may be necessary to render a disabled person fit to engage in a remunerative occupation.

The plan today is, first, to substantially reduce the evil effects of the disability or remove the disability entirely by the aid of physicians, surgeons, physical and occupational therapists, and hospitals. After these services are rendered the plan is to proceed with the proper training courses for selective job placement. Physical restoration in all feasible handicapped persons is of first order. Then follows a service which will train for return to employment.

In administering vocational rehabilitation for the State's handicapped, Indiana is divided into thirteen districts, with a representative known as a rehabilitation counselor for each. Further, the state is divided into three supervisory areas, North, South, and Central, each with a supervisor. The state office, Indianapolis, has a staff consisting of (1) Director, (2) Assistant Director and Case Work Supervisor, (3) Physical Rehabilitation Consultant, (4) Guidance, Counseling, and Training Chief, (5) Medical Social Work Consultant, and (6) Specialist for the Deaf and the Hard of Hearing.

The Indiana State Board of Education has direct control and supervision of vocational rehabilitation, under the executive direction of the Superintendent of Public Instruction, Ben H. Watt. In addition, there are two advisory committees. One of these committees is the Rehabilitation Council which assists in making regulations and determining policies governing the program. All recommendations by the Council must have the sanction of the State Board of Education. The following persons are now serving on this committee: Chairman, Professor C. E. Dammon (Purdue University); H. B. Allman (Indiana University); Robert Yoho (State Board of Health); Frank H. Sparks (Wabash College); J. Fred Murphy (Indianapolis Public Schools): A. S. Thomas (Farm Bureau); William A. Brown (Ex-Commander of American Legion).

The other important committee is the Professional Advisory Committee. This group sees to it that physical restoration services are the accepted practice and it really puts vocational rehabilitation on a professional basis. No individual may be accepted for the program without first taking a medical examination and having the medical report appraised by the physical rehabilitation consultant who is a physician. When additional medical information is indicated by the general health report, further professional advice is requested in the field in which the major disability lies.

The following are the members of the Professional Advisory Committee: Dr. Carl B. Martz (Chairman); Dr. Robert Acker (Orthopedist); Dr. James F. Balch (Urologist); Dr. C. E. Dammon (Education); Dr. Bert Ellis (Otolaryngologist); Miss Mary Ferguson (Physical Therapist); Dr. Earl W. Mericle (Neuropsychiatrist); Dr. Myron Harding (Ophthalmologist); Dr. Maynard K. Hine (Dentist); Mrs. W. C. Kahmann (Occupational Therapist); Mr. Robert E. Neff (Hospital Administrator); Dr. R. A. Solomon (Internist); Dr. J. H. Stygall (Phthisiologist); Dr. Harold M. Trusler (Plastic Surgeon).

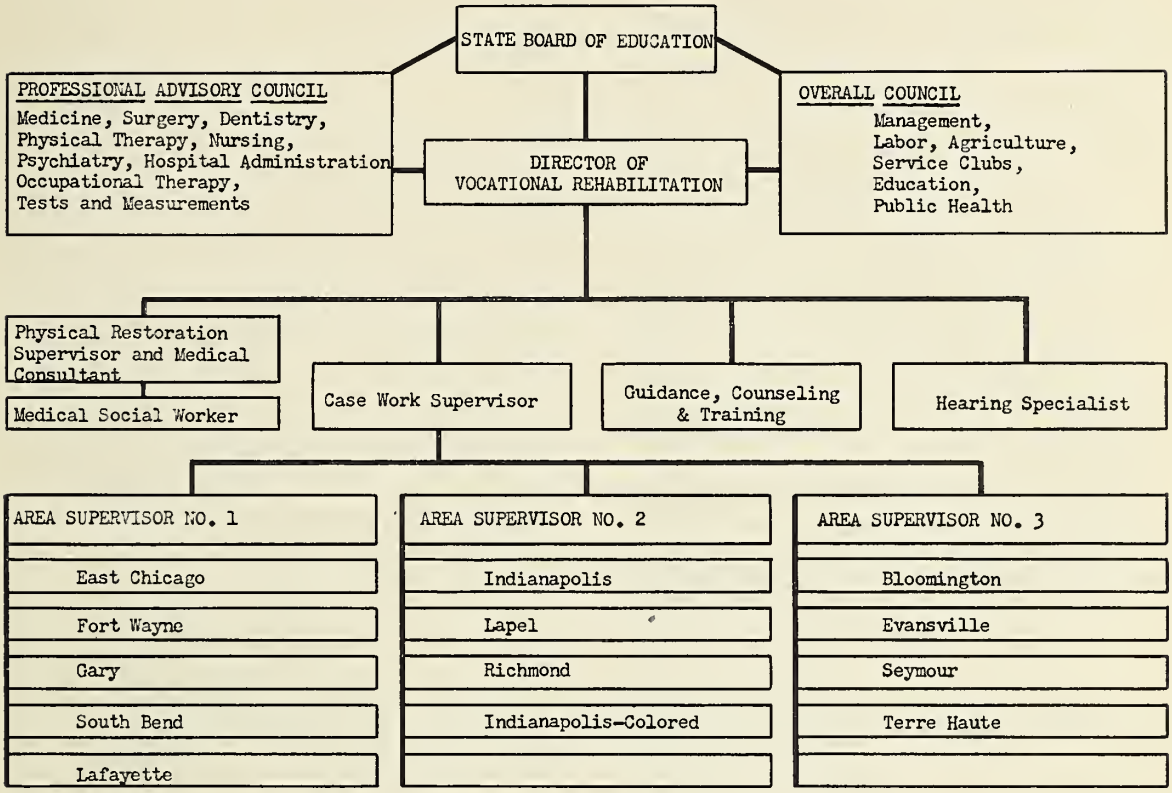
Individuals with a disability frequently apply for or are referred to the Indiana Division for a specific rehabilitation service such as an artificial appliance, medical rehabilitation, vocational training or placement. Eligibility for vocational rehabilitation is not determined solely upon an applicant's request or desire for a single rehabilitation service. Eligibility is based solely on the establishment of a substantial employment handicap, and other secondary factors, such as age and residence. What rehabilitation services are needed by the applicant or should be provided to make him employable is based upon medical and vocational diagnoses of the person as a total personality.

Medical diagnosis is the primary factor in establishing the eligibility of applicants and, also, in preventing excursions into a type of medical rehabilitation in the legal sense. Without sound medical diagnosis and medical appraisal of working ability, it would in most cases be impossible scientifically to counsel, guide, train, and achieve suitable job placement.

The rehabilitation counselor who, after getting the best available medical and other advice, works out with the applicant a program beginning with physical appraisal and ending with selective job placement. The counselor is the key individual of all rehabilitation personnel and he is responsible

* Physical Rehabilitation Consultant, Division of Vocational Rehabilitation, State Department of Education.

ORGANIZATION DIAGRAM OF VOCATIONAL REHABILITATION DIVISION



for assembling and bringing to bear upon the applicant all the factors and services that determine his eligibility and feasibility; his ability to absorb training; his medical needs; his skills and aptitudes.

Following is a list of the rehabilitation districts and supervisory areas, with the counties served:

Northern Area:

Gary District—Lake County.

East Chicago District—LaPorte and Porter Counties.

South Bend District—Elkhart, Marshall, and St. Joseph Counties.

Fort Wayne District—Adams, Allen, DeKalb, Kosciusko, Lagrange, Noble, Steuben, Wells, and Whitley Counties.

Lafayette District—Benton, Carroll, Cass, Clinton, Fulton, Jasper, Miami, Newton, Pulaski, Starke, Tippecanoe, Warren, and White Counties.

Central Area:

Lapel District—Grant, Hamilton, Howard, Huntington, Madison, Tipton, and Wabash Counties.

Indianapolis 2 Districts—Boone, Hendricks, and Marion Counties.

Richmond District—Blackford, Dearborn, Decatur, Delaware, Fayette, Franklin, Hancock, Henry, Jay, Randolph, Ripley, Rush, Shelby, Union, and Wayne Counties.

Southern Area:

Terre Haute District—Clay, Fountain, Montgomery, Parke, Putnam, Sullivan, Vermillion, and Vigo Counties.

Bloomington District—Brown, Daviess, Green, Johnson, Knox, Martin, Monroe, Morgan, and Owen Counties.

Seymour District—Bartholomew, Clark, Crawford, Floyd, Harrison, Jackson, Jefferson, Jennings, Lawrence, Ohio, Orange, Perry, Scott, Switzerland, and Washington Counties.

Evansville District—Dubois, Gibson, Pike, Posey, Spencer, and Warrick Counties.

Vocational rehabilitation provides the following services: (1) *MEDICAL EXAMINATION* (to determine the extent of the disability, to discover any hidden disabilities, and to determine the work capacity); (2) *PSYCHOMETRY* (to determine individual intelligence, interests, personality patterns and aptitudes); (3) *COUNSEL* and *GUIDANCE* (to assist the disabled person in selecting and attaining the right job objective); (4) *TRAINING FOR THE RIGHT JOB* (in schools, on-the-job, by tutor, by correspondence, or otherwise, to enable the disabled person to do the right job well); (5) *PLACEMENT ON THE RIGHT JOB* (a job within the handicapped's physical or mental capaci-

ties); (6) *FOLLOW-UP* (to make sure the rehabilitee makes good).

In addition, these services may be available provided the handicapped person establishes economic need: (1) *MEDICAL, SURGICAL, PSYCHIATRIC,* and *HOSPITAL CARE* (to remove or reduce the disability within a reasonable time); (2) *ARTIFICIAL APPLIANCES* (limbs, glasses, eyes, hearing aids, et cetera, as necessary, to increase the ability to work); (3) *MAINTENANCE* and (4) *TRANSPORTATION* (during the rehabilitation process, as necessary); (5) *TRAINING* or *PLACEMENT SUPPLIES* (tools, equipment and licenses—whatever is needed to give the rehabilitee a fair start).

No handicapped individual is permitted to enter upon any course of training until (1) objective psychometric tests have been evaluated; (2) achievement records in the past carefully appraised; (3) family background and environment reviewed; and (4) the feasibility of reaching the employment objective in light of the applicant's disability—having shown that he has the ability to carry the training prescribed for him. This phase of the program has the full time attention of the Counseling, Guidance, and Training Specialist.

Vocational rehabilitation desires the assistance of Indiana's physicians in the screening of applicants. We believe Indiana has the ideal meeting ground for the best interests of the medical, educational, and vocational guidance professions. We desire the full co-operation of the Indiana State Medical Association, and we are constantly endeavoring to develop a favorable "climate" of administration of this medico-social program that would be fully acceptable to the physicians. The nearer we can bring the physician to rehabilitation personnel, and he assumes his rightful place as captain of the rehabilitation team—the fewer will be the complaints, the difficulties, and the failures. Indiana vocational rehabilitation has come far in that direction.

The purpose of this discussion is to enlist sympathy, interest, and active co-operation from him best qualified to give it in solving the problems of the severely handicapped—the *PHYSICIAN.*

701 Board of Trade Bldg.,
Indianapolis 4, Indiana.

COUNSELING AND PLACEMENT SERVICE OF INDIANA STATE NURSES' ASSOCIATION

THE Indiana State Nurses' Association maintains a Professional Counseling and Placement Service, in its headquarters office in Indianapolis, for the benefit of both nurses and employers of nurses. This service is an integral part of the Professional Counseling and Placement Service of the American Nurses' Association, with branches in many states.

Nurses file bibliographies and credentials with this service and employers file job descriptions.

To get a complete picture of a nurse, a standard application form is used. On this form the nurse describes her own preparation and experience, and indicates the type of position for which she thinks she is prepared and in which she hopes she will be successful. From this application form a biography is made describing the professional facts about the nurse which the employer wants to know, and summarizing the recommendations of previous employers, directors of nursing, instructors, et cetera, which the counselor has assembled. This biography is sent to any employer who expresses an interest in employing the nurse, provided the nurse in question specifically asks that it be sent.

In order that the nurse may decide whether or not she is interested in the job, a job description must be filled out by the employer and kept on file in the counselor's office, where it can be referred to whenever a nurse comes in to investigate opportunities in Indiana.

It is the counselor's task to get "the right nurse interested in the right job." It is the nurse's job to go for an interview, if possible, and make her own decision about applying for the position. It is the job of the employer to decide from the biography and interview whether or not the nurse applying for the position has the preparation, experience, and attitude which will make her an efficient, interested member of the staff.

When the nurse has accepted a position or an employer who has filed a job description has employed a nurse, it is necessary that the Counselor be informed so that the job may be cancelled or the application closed for the time being.

Another duty which has been assigned to the Consultant in Professional Counseling and Placement Service is recruitment of student nurses for our twenty-seven schools of nursing in Indiana. Letters requesting information about accredited schools of nursing are answered, interviews with parents and prospective students are granted, and talks are arranged or given before interested groups whenever they are requested.

Requests for applications, job descriptions, or other counseling help should be addressed to Edwina MacDougall, 1125 Circle Tower, Indianapolis 4, Indiana.

HOME TOWN MEDICAL CARE PROGRAM OF THE VETERANS ADMINISTRATION

Charles F. Thompson, M.D.*

INDIANAPOLIS

A CURTAILMENT of the funds allotted for out-patient service to veterans has affected this program to some degree in Indiana during the past year. It has been recognized that the program for dental care, including provision of dentures, was behind schedule to greater degree than the medical service. The retarded dental service required augmentation by funds, which influenced to some extent the volume of home town medical care. In spite of both of these factors, out-patient service has been maintained at a level of promptness which has kept examinations and treatments requested by veterans up to date.

It has been the policy of the regional office in Indianapolis to utilize their facilities for diagnosis and treatment in the cases of veterans whose residence had made it possible to provide transportation to the regional office for such service without inconvenience or hardship in so far as physical condition is concerned. This policy has been followed in a manner in which there has been little, if any, conflict with the veteran's choice of physician. To what extent such a plan and practice can be continued remains to be seen. Again doctors are urged to use consultation facilities at the regional office, at 36 South Pennsylvania Street, Indianapolis, Indiana, telephone Market 1581, with regard to any urgent problem in the care of veterans.

The misunderstanding with regard to the writing of prescriptions for medication to veterans in unauthorized cases has been a recent problem. Such instances have been the basis for nonpayment to druggists for drugs dispensed in cases in which there has been no authorization for treatment. In reminders sent to participating physicians in this problem, it is to be noted that there were errors both on the part of the Veterans Administration, as well as on the part of the doctors, in prescribing for veterans without proper authorization.

At a conference in Chicago, on November 6, 1947, which was sponsored by the Council on Medical Service of the American Medical Association, and participated in by representatives of forty-one states, on the subject of "Veterans Administration Home Town Medical Care Program," at which Doctor Hawley and Doctor Harding represented the Veterans Administration, a review of the experience of the various state associations and their representatives brought to light many misunderstandings and a few just criticisms. The latter were answered satisfactorily, for the most part, by Doctor Hawley and Doctor Harding.

At the close of the conference a committee was appointed by Doctor McVay, chairman of the Council on Medical Service of the A.M.A., which included: Drs. Creighton Barker, Connecticut; John S. Bouslog, Colorado; A. E. Larsen, California; Harry V. Paryzek, Ohio; Charles N. Wyatt, South Carolina; and Mr. R. R. Rosell, Minnesota. This committee was charged with the responsibility of reviewing the papers and discussions held in the conference, for the purpose of assisting the A.M.A. committee in presenting the problem of home town care to the veteran, as it is viewed by the component state associations of the A.M.A., directly to the Veterans Administration in Washington at the next meeting of the medical advisory group of the Veterans Administration.

The more important problems voiced by representatives from the various state associations were as follows:

1. The substitution of regional office and sub-regional office service on the part of the Veterans Administration for home town service to veterans which, according to Doctor Hawley, has been necessitated by the over-all reduction in the current budget providing such service, and the fact that "such service by regional and sub-regional offices may be provided at a cost of approximately one-third of that rendered to the veteran in his home community."

2. A policy of the Veterans Administration in establishing a uniform fee schedule has still not been generally accepted throughout the various districts in the entire United States. Such uniformity of medical fees is not consistent with the variation in medical costs in different geographical areas in the country.

3. There were numerous instances of criticisms in administrative policies as carried out by regional offices which, in the opinion of representatives of state associations, were not consistent with the original "Hawley plan and policy," with respect to home community care of veterans in authorized disabilities and disease.

It was emphasized by Doctor Hawley and Doctor Harding repeatedly, as an answer to many of the criticisms of this plan that, in the first place, the Veterans Administration is limited in most instances by laws and that the extent to which services may be provided is also controlled by the amount of funds allocated by Congress. They called

* Chairman, Veterans Committee, Indiana State Medical Association.

to the attention of the conference the fact that most of the medical benefits administered through the V.A. are made on the basis of legal determination rather than medical determination, a fact which complicates many of the processes.

The future of this plan now rests on the shoulders of Doctor Hawley's successor, and the policies of the Veterans Administration with regard to such plan will be viewed with interest by all participating physicians in the state of Indiana.

FEDERAL INCOME TAX AND THE MEDICAL PROFESSION

F. Shirley Wilcox*

INDIANAPOLIS

NO laws have been enacted during the year 1947 affecting Federal income tax rates or personal exemptions. The Form 1040 for the year 1947 is almost identical to Form 1040 for the year 1946.

The statutory net profit from a medical profession engaged in individually is recorded in Schedule C of Form 1040 for the year 1947. A written record of receipts and expenditures is highly important to an individual with income from a profession. It is intended that a taxpayer's regular accounts, files of receipts, and usual records shall be sufficient for filing income tax returns, provided that actual and complete information is available and the taxpayer is prepared to prove the essential reality of claims or statements made.

Expenses deductible in arriving at the net profit, in Line 22, Schedule C, are the normal costs of producing the income. Such expenses must be distinguished from those incurred for the convenience, comfort, or economy of the individual pursuing the profession, or in the nature of loans, gifts, capital investments, and the like. The distinction lies in the purpose and nature of the payment rather than in any account in which it may be charged. Business expenses may include salaries and wages paid, interest on business indebtedness, taxes on business and business property, depreciation, rents, repairs, and other expenses. Other includable items are commissions, supplies, advertising and insurance payments for one year.

In the case of a professional man, maintenance and repair expenses of an automobile used for professional purposes (but only that portion of the expenses applicable to the professional use) are allowable, as well as membership in professional societies, subscriptions to professional journals, current magazines used in the reception room, and fees paid to other professional men for professional assistance.

If a professional man uses his residence as office and home, he may deduct the expense applicable to that part used for professional purposes.

Expenses not deductible include the cost of books and the cost of instruments and equipment having a useful life longer than one year (these are regarded as capital items on which depreciation may be allowable) and membership dues in a purely social club.

The cost of incidental repairs is deductible, provided the property account is not increased by such expenditures, but repairs in the nature of replacements, betterments, and improvements are regarded as capital expenditures and are not deductible.

If the physician has other income, such income should be reported on the applicable schedules found on Page 2 of the return, namely: (A) Income from Annuities or Pensions; (B) Income from Rents and Royalties; (D) Gains and Losses from Sales or Exchanges of Capital Assets, et cetera; (E) Income from Partnerships, Estates and Trusts, and other sources.

If a physician has income from a farm, the net farm profit is determined by itemizing the farm income and deductions on Form 1040F in the same manner as in previous years. The net farm profit as determined on Form 1040F may be properly indicated in Schedule E under "Other Sources." Form 1040F should be attached to Form 1040 when filing. Total income as listed on Page 2 should be entered in Line 5, Page 1, of the Form 1040.

Physicians receiving compensation for personal services subject to the withholding tax should not include such compensation in total income in Schedule C, but should indicate the amount of such compensation in Item 2, Page 1, of the return.

The adjusted gross income for the year 1947 is the amount shown in Line 6, Page 1. The individuals whose adjusted gross income is less than $5,000 will be able to determine their tax from the optional tax table on Form 1040. The amount of tax on the tax table allows for personel deductions, such as contributions, interest paid on personal indebtedness, and personal taxes of approximately 10 per cent of the adjusted gross income.

Taxpayers who are not permitted to use the tax table because their adjusted gross income is $5,000

* Collector of Internal Revenue.

or more may take a standard deduction of $500 in lieu of listing the actual items of deduction. Any taxpayer who elects to compute his tax may itemize his various allowable non-business deductions and credits much the same as for previous years. The computation instructions and rates for individuals not using the tax table are furnished on Page 4 of the instruction sheet.

The requirements for exemptions to be indicated in Item 1, Page 1, are the same for the year 1947 as for the year 1946, i.e.:

(A) An exemption of $500 for the taxpayer;

(B) An exemption of $500 for the spouse of the taxpayer if—

(1) a joint return is made by the taxpayer and his spouse under section 51, in which case the exemption of the spouse is under subparagraph (A) and this subparagraph shall be only $1,000 in the aggregate; or

(2) a separate return is made by the taxpayer and his spouse has no gross income for the calendar year in which the taxable year of the taxpayer begins and is not the dependent of another taxpayer;

(C) An exemption of $500 for each dependent whose gross income for the calendar year in which the taxable year of the taxpayer begins is less than $500, except that if such dependent is married the exemption in respect of such dependent shall not be allowed if such dependent has made a joint return with the other spouse under section 51 for a taxable year beginning in such calendar year.

Determination of Status—The determination of whether an individual is married shall be made as of the last day of the taxable year, unless his spouse dies during the taxable year, in which case such determination shall be made as of the date of his spouse's death.

Definition of Dependent—As used in this chapter, the term "dependent" means any of the following persons over half of whose support, for the calendar year in which the taxable year of the taxpayer begins, was received from the taxpayer:

(a) a son or daughter of the taxpayer, or a descendant of either;

(b) a stepson or stepdaughter of the taxpayer;

(c) a brother, sister, stepbrother, or stepsister of the taxpayer;

(d) the father or mother of the taxpayer, or an ancestor of either;

(e) a stepfather or stepmother of the taxpayer;

(f) a son or daughter of a brother or sister of the taxpayer;

(g) a brother or sister of the father or mother of the taxpayer;

(h) a son-in-law, daughter-in-law, father-in-law, mother-in-law, brother-in-law, or sister-in-law of the taxpayer.

As used in this paragraph, the terms "brother" and "sister" include a brother or sister by the half-blood. For the purpose of determining whether any of the foregoing relationships exist, a legally-adopted child of a person shall be considered a child of such person by blood. The term "dependent" does not include any individual who is a citizen or subject of a foreign country unless such individual is a resident of the United States or of a country contiguous to the United States.

Attention is especially directed to the fact that a spouse is not in the same category as a dependent in that it is necessary to include the spouse's income in a joint return even though the income of the spouse is less than $500; otherwise it will be necessary to eliminate the exemption for such spouse.

If the final Form 1040 for the year 1947 is filed on or before January 15, 1948, and the tax as shown due is paid in full, the taxpayer is relieved of filing an amended declaration of estimated income tax, which might otherwise be required on that date. If there has been no material change in the estimated income tax, and the fourth installment of the estimated tax for the year 1947 is paid by January 15, 1948, the due date for filing the final 1947 Federal income tax return is March 15, 1948. The payment accompanying a final return must cover the full amount not previously paid in connection with the declaration of estimated tax or through withholding.

On or before March 15, 1948, an individual deriving his income from the medical profession is required to file a declaration of estimated income tax for the year 1948 and pay at least one-fourth of the estimated tax at that time.

It is suggested that if any specific question arises relative to the determination of the Federal income tax you communicate with the Collector's Office, Federal Building, Indianapolis, or contact the nearest zone or division office in Indiana.

GROUP PRACTICE OF MEDICINE

THIS article is not intended to be an argument either for or against group practice. It is intended as a statement of the legal methods and responsibilities involved in group practice if physicians desire to carry on their practice in association with other physicians as a single unit.

The law recognizes two methods by which groups may come into existence and carry on a business or profession as such. One is a partnership and the other is a corporation. The distinguishing features of these two groups is to be found in the extent and nature of the liabilities of the individuals who may have an interest or share in the unit, whether a partnership or a corporation.

A partnership may come into existence without any formal agreement, or without any definite purpose on the part of the members to be held responsible as partners. They must have a definite purpose, however, to work together in an enterprise which they own and control and in which they have interests, whether equal or unequal. The courts have held in some cases that groups of people constituted partnerships, even against the contention of each person in the group that it was not a partnership. It is the joint control, ownership, right to share profits upon some basis, and obligation to pay losses, that determine the existence of a partnership. If a partnership is to be formed it is better to have a definite understanding regarding the business relationships of the persons constituting the partnership, and this definite understanding should be in writing.

A written contract is no more binding than an oral contract, unless the written contract is one the law requires to be written. If the agreement is from year to year the law does not require it to be in writing. But there is always the uncertainty of proving what the actual agreement was unless it is written. Misunderstandings or failure to remember the oral statements confuse the problem of determining what the actual oral agreement was. This is avoided by having it in writing.

The members of a partnership are separately liable for all the debts of the partnership. If one has funds through which the debts of the partnership may be paid and the other does not, then the one who has funds may find himself obligated to pay the debt that may have been created solely through the act of the other partner. This liability of each partner individually for all the debts of the partnership leaves a partnership a somewhat dangerous form of group arrangement, unless the partners all have sufficient funds that no one of them will be left to pay a debt without the possibility of obtaining contribution from the other partners. While each partner is liable for all the debts of the partnership, yet the one who pays has the right to exact contribution from the other partners of their proportional share of the debt. This remedy, however, is of little value if the other partners are financially unable to make contribution.

The advantage of a corporation over a partnership is in the fact that the member of a corporation is not liable for the debts of the corporation. The member of the corporation makes his contribution to the capital fund of the corporation through the purchase of stock. Then if the corporation creates a debt through the action of its officers or directors as such, the debt is not one personal to the members of the corporation. That debt is paid from the funds of the corporation. If the funds obtainable are insufficient, then the corporation is insolvent, and whatever property it has may be distributed among the creditors pro rata, leaving the stockholders of the corporation free from any personal obligation of their own. They can lose only their investment in the corporation.

The corporation form of organization, up to this point, would appear to be the best form of organization. But there are some difficulties in connection with the corporation method.

First, the corporation pays a federal income tax on any profit made by the corporation. It also pays a state gross income tax on its gross income without regard to whether it makes a profit or suffers a loss. However, the amount of federal income tax can be kept down by making the salaries payable to the physicians who own the corporation large enough to absorb all the income. If that is done the only tax the corporation pays is the gross income tax. Where the gross income tax is paid by the corporation and then the corporation pays as salaries to the physicians the proceeds available for such salaries, the physicians themselves also pay a gross income tax when the money comes into their hands. This tax takes 2 per cent of that part of the gross income of the corporation which is distributed to the physicians practicing in the group organized as a corporation. There are other tax problems that may be involved with the corporation which, however, are little likely to result in higher tax being paid, except for this extra 1 per cent for gross income, than would otherwise be paid by the same physicians.

The second difficulty about an incorporated group is that under a decision of the Indiana Supreme Court the corporation cannot practice medicine. As an actual fact the practice must be by a person or persons licensed to engage in the practice. The corporation cannot have a license. It is an impersonal entity and, as such, of course has neither physical nor legal power to practice medicine. From this it follows that the individual who renders the service would be personally liable for malpractice. In the partnership each of the partners is regarded as an agent for all the other part-

ners and the general principle of agency applies. The partners, being mutual agents for each other, may all be held jointly liable for the malpractice of any one of them.

This discussion with regard to malpractice is not too important, however, for in a well managed practice of medicine insurance against malpractice will always be kept in effect in sufficient amount to protect the physician, whether he is in a corporation or in a partnership.

The incorporated group has some very distinct advantages in the possibility of preserving the value of the practice as something that may, to some extent, be passed on as an asset of his estate for the benefit of his family. A partnership ends by the withdrawal or the death of one partner, no matter how many may be in the partnership. Provision can be made for the perpetuation of the partnership through an automatic reorganization pursuant to the original partnership agreement. But the most convenient and generally the most successful method of preserving the value of one's interest in group practice is through a corporation set up with proper safeguards and limitations pertaining to the sale of the stock, either by the physician himself or by his executor or administrator in the settlement of his estate.

The exact forms of partnership agreements and of corporation organization could not be set out in an article of this kind, for the reason that the whole of the contract or the corporation organization must be adapted to the particular group and the purposes which they seek to achieve under the facts as they are in their own group.

THE BUSINESS PART OF THE PRACTICE OF MEDICINE

IT IS interesting to note that the law separates the practice of a profession from the collection of fees and from other business incidents pertaining to the practice. Thus the information a physician acquires from his attendance and service in the sick room is privileged—that is, the physician is not permitted to testify to such matters, or in general to discuss them with other people, except as it may be to the interest of the patient to do so or as it may be required by law. But what the physician sees and observes in regard to a patient while collecting or attempting to collect his fee from the patient is not privileged, and he may be compelled to give a statement as to what he learned in that relationship with the person who was his patient. The physician-patient relationship does not exist as between the two when the physician is engaged in collecting his fee. The relationship then is merely that of any creditor with any debtor. Yet an important part or incident in the practice of any profession is the business part of it. The line that divides the business part from the professional part of the relationship is not always clear. Both may require the keeping of records, the making of reports, and the exercise of discretion and judgment in connection with the question as to how one phase of this relationship may affect the other phase.

In the matter of collections a physician has the right to employ a collection agent or to make the collection himself. He would have the right to file a suit to collect his fee, but it is doubtful whether in a complaint in such an action he would have the right to set out what the symptoms of the patient had been and what his diagnosis was, unless that would be necessary to state the case for collection. It would be proper to set out the actual service rendered in those instances where the amount charged was based upon the actual value of the services in the particular case, and not upon some standard fixed by custom or general recognition or by understanding between the physician and the patient. That is, if the patient and the physician understand and agree that the physician is to be paid so much per office and so much per home or hospital call, then the only thing that would be necessary would be to allege in the complaint the number of hospital, home and office calls, and the accepted or agreed amount to be paid for each.

On the other hand, if there were some difficult procedure attended necessarily by the assumption of grave responsibilities that would be a source of anxiety and worry and might require extra preparation for the performance of the service required, and no fixed amount had been agreed upon, then it would be appropriate to set out enough of the facts regarding the actual service rendered to furnish a basis for the determination of the real value of the services. But if the physician included in his complaint unnecessary statements regarding the patient, to the embarrassment and humiliation of the patient, the question would arise as to whether the physician had not violated his duty of keeping confidential the facts that he learned as a physician regarding the patient.

Indiana collection agencies must be registered under a 1937 Act. Even though the collection agent is operating as an independent business there is a legal problem as to whether or not the person who employes the agency may not be re-

sponsible for the acts of the agent. One view of that situation is that the collection agent is in law and in fact an agent or servant of the person whose bill he undertakes to collect. The other view is that the agent is an independent contractor—that he undertakes to make the collection by methods which are not under the control of the creditor, but under the control of the agent. If the latter view prevails, then the physician would not be liable for the acts of the agent in the agent's attempt to collect the bill. But if the other view prevails, then the physician would be liable for the acts of the agent performed in collecting, or attempting to collect, the bill. It would seem that in Indiana the collection agency might be regarded as an independent contractor, since the Indiana Statute requires that the collection agency post a bond before entering into that business, although that fact would not necessarily be controlling.

In any event, in the collection of an account, drastic methods are not to be recommended. The physician should not of course make threats as to what he will do, except to the extent that a statement that he intends to sue if the bill is not paid may constitute a threat. The statement of the intention to sue unless the debtor pays the bill is entirely proper. In fact, the courts regard it as a mark of fair dealing for one to inform another of the demand he is making and of his intention to sue if the demand is not complied with, before bringing the debtor into court. The creditor should not violate the debtor's right of privacy. This violation might occur through one attempting to subject another to public humiliation and embarrassment in order to compel the other to pay a claim which might be in dispute. There is a possibility of legal difficulties developing if a physician informs his patient that he will put his name on a black list if he does not pay.

The sound way in which to handle collections is the way followed by business institutions generally. They make a demand attended by a statement of intention to file suit if the demand is not complied with. Then if the payment is not made they file the suit and let the court determine the rights of the parties. All this should be done without any attack on the character or reputation of the debtor.

There are systems of book and record keeping that have been worked out by those who deal with problems of that kind. The system appropriate to the practice of any physician should be worked out to fit his particular problems. Students of office management, accounting, and bookkeeping are generally familiar with these systems. An adequate system is often of great value, not only in handling the business end of the office, but also in defending against a malpractice suit. They are necessary for making proper tax reports.

INVESTMENTS AND PROTECTION

IT IS doubtful if anyone is wise enough regarding either investments or the making of provision for the financial protection of himself and his family to be a very sound advisor to anyone else on these subjects. The great colleges, universities, and foundations for the support of worthy purposes have employed the best trained investment counsellors, but it is not unusual to find that their capital has decreased in value through investments that proved unwise in the light of events the counsellors could not foresee.

If one provides an insurance income for his dependents they may find themselves facing a tremendous inflation, in which event the money paid as insurance income would have but little value. If that eventuality develops, then the investment in real estate, machinery, and commodities would be the best. But a new invention may make the investment in machinery lose its value. Unanticipated development in a great city may make the real estate investment of no value. Taxes might consume it entirely under some conditions. Investment in government bonds is in effect the equivalent of saving the money itself, except that the money itself would draw no interest and would not fluctuate as to the amount, when measured only in dollars. But the money and the bonds both lose their value in a period of inflation—just as investments in real estate and commodities, particularly in a period of high taxes, lose value in a period of deflation. If anyone could accurately anticipate future events all forms of investment could be made by him with complete safety.

In spite of these discouraging difficulties in regard to investments there are a few plans that seem reasonably sound to follow when making investments and providing for protection of one's family.

Life Insurance

Life insurance may be viewed from two aspects:

1. As a protection to a person and to his family; and
2. As an investment where the element of protection is of no consequence.

When one marries and has a family he feels a sense of responsibility to make some provision for their future. He can set up an estate that will come into existence at the time of his death, through life insurance. The amount of such insurance, of course, must be governed by the amount of income and the other financial demands upon the insured. He can afford to be forced into a life of thrift in his younger days, anticipating that the burden of his life insurance premiums will grow lighter as he continues to increase his income.

Nevertheless, the amount of such protection should not be such as to force that amount of thrift which would make the life of himself and his family miserable in their younger days in order to have something to riot on when they grow older.

A self-made man has been defined as one who, by unrelenting thrift and industry, succeeds in accumulating enough to have in his old age what he could have enjoyed only in his youth. A childhood enriched by the interests and activities which may fit him adequately into the world in his maturity affords to that person a better protection than an impoverished youth that leaves him ill adapted to the world in his maturity, even though he comes into money in his maturity.

But to adhere more strictly to the discussion of investments—the varieties of life insurance for investment and for protection are numerous. The genius of actuaries and of business men has expressed itself in producing so many different forms of policies that it is possible to find a form of policy that will fit practically every condition. But in this connection it is important that one deal with those who are informed upon the subject and who are capable of interpreting the condition to be met in terms of the policies that will meet the condition.

Securities

Certain securities are regarded in law as safe enough to have funds, that are impressed with a trust, invested in them. These include government bonds, bonds or notes secured by mortgages on real estate worth not less than two-thirds more than the amount of the loan, securities of solvent corporations which earned at least 6 per cent of the par value of its capital stock for seven fiscal years prior to the date of purchase. (Note that this is 6 per cent of the par value and not of the amount paid for the security.) There are a number of other things in which such funds may be invested. These illustrations have been taken from the statute on insurance.

An investment in a security yielding a high income presently, but with the possibility that the value of the stock will go down, may not be attractive to a person who already has a large income. It only increases the amount of his taxes. On the other hand, an investment made in a new industry or business which has a reasonable chance to develop successfully may prove to be a more satisfactory investment to one who does not need the present income. It avoids the taxes on the income. If held long enough the tax will be on the basis of a long term gain and payable only at the time of the disposition of the stock. If held until death the increase in the value of the stock may be reflected in the inventory of the estate and that increase would then be reflected in the estate tax, if the decedent had a net estate of $60,000 or more, and in the inheritance taxes. So the person having a satisfactory present income, if he could only be sure of the result with respect to a new business, would do better to invest in the new business and have his income contained within the increase in the value of the stock, even though no dividends were being paid.

Real Estate

Real estate may afford an opportunity for investment where present income would be a desirable feature, or may also be a good investment where present income may be disregarded and future increase in value may be the end sought. But here again the element of sound judgment and reasonably accurate forecasting is involved. Some have purchased real estate at little value and planted it in something that helped to improve the ground. They have continued the operation of it without regard to present profit, but for the purpose of making it better real estate, with the expectation of profit on the venture being realized later by the investor or his family. Orchards, of various kinds, and timber have been developed in some of such ventures. In some instances land containing undeveloped mineral resources known to exist in it has been purchased, to be held until demand for new sources of the minerals reached the lands where the minerals lay dormant.

Conclusion

A wide diversification of investments seems to afford protection and also the opportunity for one to indulge a gambling or speculative chance on something that may yield a windfall. The latter hope should never be allowed to become so powerful and persuasive as to induce the investor to put in more than he can afford to lose.

To what has already been said, of course, should be added the suggestion that one make a serious effort to obtain all the facts he can with respect to the thing in which he expects to invest his money before he makes the investment. And finally, it would be well, too, to follow the copybook maxim regarding thrift and industry in one's own business if he would acquire even a meager fortune. The advice of Robert Burns upon that point is sound:

> "To win Dame Fortune's golden smile
> Assiduous wait upon her,
> And gather gear by every wile
> That's justified by honor."

MALPRACTICE AND MALPRACTICE SUITS

THE public is becoming better and better informed regarding medicine. Educational programs of various kinds serve to bring at least the reading public into possession of many facts in that field which the general public a few years ago found practically inaccessible. These educational activities assume many different forms. For instance, some magazines, such as *Time*, have a section devoted to medical news. Many newspapers carry syndicated articles written by physicians. Some radio programs give out statements regarding health and disease. *Hygeia* has a rather wide circulation. There are campaigns to raise funds to prevent and cure certain types of disease. These campaigns generally have an educational element.

From all these sources the doctor's patient is likely to have some ideas regarding treatment, which of course may be very erroneous but in which he has great confidence. If his physician fails to use some of the medicines and procedures of which he has acquired either accurate or inaccurate information, but still what he regards as dependable information, he is likely to think that the physician has failed to conform to the proper standards of treatment he should have received. If the patient himself may not have come into contact with these sources of information he may have a friend who discusses his case with him and points out the failure of which the friend believes the physician was guilty.

The public has become more claim-conscious than it used to be, as a result of widespread insurance in all fields. Insurance is being paid because of accidents, of illness, of property damage through fire, collision, explosion, or other causes. So the situation no longer exists where one may hesitate to make a claim against another because the other is his friend and neighbor and would be caused loss and damage on account of the claim. Many people assume the attitude that it will be no disadvantage to the person sued because an impersonal insurance company stands ready to pay the bill anyhow.

The result of all this is that malpractice suits are increasing in number. One of the things that helps to keep that number down is to defend and not pay merely a nuisance value to get rid of a case, where there is no actual ground of liability for malpractice. Another thing that keeps down the number of such suits is the fact that the public is becoming aware that it is difficult to win a malpractice case where the doctor has a real defense in the law and the facts.

This article is not a duplication of the article in the Indiana Medical Year Book for 1947. You are asked to refer to that Year Book if you want a statement of the laws pertaining to malpractice. Two articles, under the subjects "Physicians In Court" and "Privileged Communications," are contained in that Year Book. They are recommended for re-reading by any physician facing a malpractice suit, or by any physician seeking to avoid having a malpractice case filed against him.

RECIPROCITY BETWEEN STATES REGARDING ADMISSION TO PRACTICE

ARRANGEMENTS have been established between Indiana and practically all other states regarding reciprocal recognition of certificates for licenses to practice medicine issued by the State Board of Medical Registration and Examination of Indiana and similar boards in other states. The duty and power to establish these rules and regulations was conferred upon the Indiana Board in the Act of 1897, in the following words:

> "It shall have power to make and establish all necessary rules and regulations for reciprocal recognition of certificates issued by other states, and to prevent unjust and arbitrary exclusions by other states of graduates in medicine from this state who have fulfilled its requirements."

While the board is given ostensible power "to prevent unjust and arbitrary exclusions by other states" of our graduates, as a matter of fact the only power that the board has to prevent any action by other states is through the exercise of a certain type of reprisal—Indiana refuses to admit physicians holding certificates in other states unless the other states will, on the same terms, admit the Indiana physicians.

The rules and regulations are by no means static. The nature of the whole problem of reciprocity is such that the rules must constantly be undergoing revision. The general theory is that whoever comes into Indiana by reciprocity must come in with qualifications that satisfy all the standards established in this state. That same theory pertains to admissions of our physicians into other states. The standards established in this state change with the progress of medicine. So do they in all other states. What once was a requirement may be abandoned. What had never been a requirement may be added. And with this going on in the forty-eight states of the union, there are always new problems of evaluating the requirements of the states as applications

for certificates upon reciprocity come before the board.

Much of this information is readily at hand in the office of the State Board of Medical Registration and Examination of Indiana. That is particularly true of the elements that are somewhat static. But much of it must be obtained by checking with the state to or from which the physician desires reciprocity with Indiana.

Under these circumstances, to set out the existing rules and regulations in this article might be highly misleading within a short time after its publication. The one safe procedure to follow, so that a physician does not base his decision upon information that might be obsolete, is to inquire for information regarding the state in which the physician is interested, at the office of the state board. A request by letter or otherwise for such information will bring a prompt reply as to information at hand. If it is not immediately available in the office the office will at once obtain, without expense, the information necessary to answer accurately such inquiries. The address of the board to which any such inquiry should come is: State Board of Medical Registration and Examination of Indiana, K. of P. Building, Indianapolis, Indiana.

LAWS PERTAINING TO THE STATE BOARD OF MEDICAL REGISTRATION AND EXAMINATION

THE history of the regulation of the practice of medicine under statutory law in the state of Indiana is set forth in an article in the 1947 Year Book, entitled "Statutes of Indiana Regulating the Practice of Medicine." For the laws regulating the practice of medicine prior to 1947 see that article.

Since the publication of the 1947 Year Book there has been added to the medical practice laws the act requiring annual registration of physicians. Under that act all who hold a certificate for a license to practice the healing art in any form in Indiana are required to register with the Board of Medical Registration and Examination of Indiana during the months of July and August of each year, beginning with July, 1947. The first registration was for the period ending June 30, 1948. The applicant for registration pays a fee of $5.00 at each registration if he lives within the state of Indiana. If he does not live within the state of Indiana, then his annual registration fee is $10.00.

Failure to register automatically cancels the certificate and license issued thereunder. Continued practice after the cancellation "shall be considered as practicing without a license. A certificate cancelled for failure to register may be reinstated by said Board upon submission of the applicant's last registration certificate together with the current and delinquent fees and a penalty in the sum of $10.00."

The funds obtained from these annual registration fees go into the general fund of the state. Appropriations are made from the general fund for the use of the board, but the amount of the appropriations cannot exceed the amount of the annual registration fees paid in.

Reporting Epilepsy and Other Types of Unconsciousness

Another statute requires the reporting of all cases of epilepsy to the Board of Health and to the Bureau of Motor Vehicles.

This latter act resulted from the attention the public gave to a tragic accident in which a person, while unconscious, drove his car across the sidewalk on Washington Street and into Ayres' store. The act requires all physicians to report every person diagnosed "as a case of epilepsy or similar disorders characterized by lapses of consciousness." These reports by the physicians are made to the State Board of Health and the board reports all these cases to the Bureau of Motor Vehicles. The reports are kept confidential and used solely for the purpose of determining whether one may obtain a license to operate a motor vehicle. Failure by a physician to report such cases constitutes a misdemeanor punishable by a fine in any sum not exceeding $100.00.

There has been considerable comment received in the offices of those who enforce this law. The rules adopted by the Motor Vehicle Department require that the license to operate a motor vehicle be withheld, or revoked, from any person subject to periods of unconsciousness. This is not confined alone to epilepsy. How severe the case may be and how rigorously the physicians follow the law in making reports are bound to present some difficulties. Upon the reporting of a case by a physician under this statute, a hearing is had in the Responsibility Division of the Motor Vehicle Department of the office of the Secretary of State. There is a right of appeal to the Circuit Court from the revocation or withholding of a license.

REGARDING THE LAWS OF ADOPTION

ANY resident of the State of Indiana desiring to adopt any person under twenty-one years of age may, by an attorney of record, file a petition with the Clerk of the Court having jurisdiction of probate matters in the county where the petitioner resides, or where such child may be found. In event the adopting parents are married, it is necessary that both husband and wife join in the petition.

The petition must be filed in triplicate. The court keeps one copy, one copy is delivered to the State Department of Public Welfare, and one to the County Department of Public Welfare or other qualified investigating agency. The petition must state the name, color, sex, age, place of birth, and name to be given the child and whether or not the child is the owner of any property. The residence, date of birth, place and date of marriage of the adopting parents also must be given. If the child is a ward of any court or agency the name of said court or agency must be given.

After the petition is filed, the agency to whom it is referred must make an investigation and report to the court on the advisability of making the adoption final. The law contemplates that a sufficient time lapse between placing the child in a home and the final adoption, so there will be no doubt as to the advisability of the adoption from the standpoint of the fitness of the parents to have the child, and from the standpoint of the normal development of the child. The report of the investigating agency is merely advisory and is not binding on the court.

If the child sought to be adopted has parents living, he, she, or they shall consent in writing to the adoption. If the parent be a minor, the consent must be accompanied by the written approval of the investigating agency.

In case the child has been born out of wedlock, the consent of the mother shall be sufficient, unless the paternity of the child has been established by law, when the consent of the father is necessary. If the child is fourteen years or over, his consent is also necessary.

Upon an adoption becoming final, the adopting parents are chargeable under the law for the support, maintenance, and education of the child, the same as their own natural child. The child will inherit from them the same as a natural child. The court, upon entering the order of adoption, will make an order directing the change of name of the child, which order will give the city, county or State Board of Health authority to issue a new birth certificate showing the child's name under the adopted name, making no reference whatever to the adoption, but will carry the same information as would be carried in a birth record of a natural child.

It is unlawful for any person or organization to engage in the business of placing children for adoption, unless such person or organization is licensed by the State Department of Public Welfare.

In event of the adoption of illegitimate children, unless the adoption has been definitely arranged for between the parents of the child and the adopting parents, it is deemed advisable to have the child made a ward of the court or of the Department of Public Welfare, and then proceed with the adoption from there on by having the adopting parents make their application to the court, or the Department of Public Welfare, or duly licensed child placing agency.

REGULATION LICENSING OF HOSPITALS

UNDER an act of 1945 the State Board of Health licenses and regulates hospitals through a council consisting of eight members, four of whom are persons engaged in hospital administration, one of whom must be from the State Department of Public Welfare, one of whom must be from the State Board of Health, one of whom must be a physician, and one of whom must be a registered nurse. A hospital is defined as "any institution, place, building or agency represented and held out to the general public as ready, willing and able to furnish care, accommodations, facilities, and equipment, for the use, in connection with the services of a physician, of persons who may be suffering from deformity, injury, or disease, or from any other condition, for which medical and surgical services would be appropriate for care, diagnosis or treatment." The definition excludes specifically convalescent homes, boarding homes or homes for the aged; institutions for the care and treatment of mental illness, retardation, convulsive disorders or other abnormal conditions; and offices of physicians where patients are not regularly kept as bed patients.

Under that law no hospital, public or private, except Federal Government hospitals, can be operated in Indiana without a license issued by the State Board of Health through the hospital council.

The hospital council has the right to make rules and regulations pertaining to the management of the hospitals, "particularly for the establishment and maintenance of standards of hospitalization required for the efficient care of patients." The council may adopt minimum standards as to equip-

ment and care of patients to which an institution must conform in order to operate lawfully as a hospital.

This act is now of great importance to the state of Indiana. In order to obtain the benefits of the Hill-Burton Act, under which funds may be obtained to pay for part of the cost of construction and improvement of hospitals, the hospital seeking such funds must establish satisfactory rules and regulations. The administrators of the Hill-Burton Act have adopted forms and certain rules of procedure which indicate that a hospital may not be able to obtain funds unless it is registered as an approved hospital. The laws of the state of Indiana under which county hospitals have been established require that the county hospitals be open to all physicians residing in the county, to perform any service they choose to perform without regard to special training for such service. These laws also would keep the hospitals open to any licensed physician, and he could lose his right to admission to the hospital only by the revocation of his license.

An effort is being made by many counties to establish rules and regulations for the protection of patients against physicians unqualified to perform specialized services, and to establish reasonable standards of qualifications for various services to be performed in the hospitals. A case is now in the courts in which the question of the right to exclude a physician from performing certain services in a hospital until he meets the qualifications set up in the hospital rules, will be decided. It is hoped that the decision may be reached at an early date, and will sustain the right of hospitals under the 1945 Act to make rules for the admission of physicians to practice in hospitals.

TESTS FOR SYPHILIS

THE law requires that "every physician attending pregnant women in the state shall, in the case of every woman so attended, take, or cause to be taken, a sample of blood of such woman, at the time of diagnosis, and submit such sample to an approved laboratory or for a standard serological test for syphilis." If the person attending a pregnant woman is not a physician and not permitted by law to take blood specimens such person is required to cause a sample of blood to be taken by a duly licensed physician and submit it in the same manner for a test. A standard serological test is one recognized as such by the State Board of Health.

In reporting births and still-births, the person making the report must state whether a blood test for syphilis was made during the pregnancy upon a sample of the blood of the mother of such child. The report is not required to state the result of the test. If no test was made either during the pregnancy or at delivery the reason for not taking it must be stated.

There is no penalty fixed in this Act for failure to perform the service required. But a thing may be unlawful even though no penalty may be incurred in connection with it.

As to civil liability, that is, liability for the payment of damages, there are no decided cases in the reports of the Supreme and Appellate Courts in Indiana. The apparent purpose of having the test made is not only to obtain information of a statistical nature regarding syphilis that might be of value in developing means to eliminate the disease, but also for the purpose of indicating the necessity or advisability of treatment of the mother for syphilis, with the view that treatment may be such that the child may be born free from syphilis.

A failure to conform to this law would not render the physician liable in damages in a civil suit unless it could be proved that because of such failure the child suffered actual physical injury. If the child were treated for syphilis after birth, where the mother had not been given the test and had received no treatment, the child might suffer no personal injury whatever. The treatment at either time might be equally effective. So it is doubtful whether any damages would be recoverable from the fact alone of the failure to have the test made. At least it would be necessary to show that the failure to have the test made was the direct or proximate cause of personal injury to the child. Obviously, if the child were treated effectively following the birth and satisfactory results were obtained, it would be very difficult, if not entirely impossible, to show that there was any damage sustained by the child.

The same principle for the determination of liability, if any, for injuries to the mother would apply. If the fact that the treatment was delayed from the time the mother was first examined by the physician until after the birth would not in itself result in any worse condition to the mother than she would have suffered if the treatment had begun before the delivery, of course there would be no grounds for action against the physician—for in that event there would be no injury resulting from the delay.

THIS YEAR BOOK AND THE 1947 YEAR BOOK

IT IS not the intention to include in the 1948 Medical Year Book the text matter included in the 1947 Year Book. To reprint in each Year Book the articles of the preceding year and add current matters of interest would result ultimately in a cumulative year book, both expensive and unnecessary. So it was intended that in the 1948 issue whatever subjects were discussed in the preceding Year Book would be elaborated further only where necessary to bring it down to date in the present issue; and that the 1948 Year Book would not contain reprints of the entire articles of the earlier book, but would be made up of articles dealing with current new things.

These year books, as they keep coming annually, should be preserved. They will contain much information that will be of value and they are well adapted to use for reference purposes.

The articles that appeared in the 1947 Year Book were:

Laws Pertaining to Malpractice
Physicians in Court
Privileged Communications
Narcotic Laws
The Family Physician in Relation to Vocational Rehabilitation
Statutes of Indiana Regulating the Practice of Medicine
The Disposition of Your Estate
Beginning, Continuing and Terminating Relationship of Physician and Patient
Councilor Districts of the Indiana State Medical Association
The Law Pertaining to Interns, Externs and Residents
Care of the Insane
The Physician and the Welfare Acts
Workmen's Compensation Act
Trusts, Life Insurance and Annuities
Sterilization
Laws Regarding Abortion
Regarding Birth and Death Certificates
Legal Aspects of Autopsies
Federal Income Tax and the Medical Profession
The State Inheritance Tax
National Foundation for Infantile Paralysis
Medical and Hospital Care under the Veterans Administration
List of Presidents of the Indiana State Medical Association since its Organization
Indiana State Board of Health Organization, Functions and Services
Diseases Which Must Be Reported to Health Officer
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Principles of Medical Ethics of the American Medical Association
Constitution and By-Laws of the Indiana State Medical Association.

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Fort Wayne State School, Fort Wayne—Luther T. Hurley, superintendent.

Southern Indiana Tuberculosis Hospital, New Albany—John V. Pace, M.D., superintendent.

Muscatatuck State School, Butlerville—Cliff Bemish, superintendent.

Indiana Village for Epileptics, New Castle—W. C. Van Nuys, M.D., superintendent.

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APPROVED HOSPITALS AND SANITARIUMS IN INDIANA

City	Type	Beds
Alexandria		
Alexandria Clinic	M.&S.	2
Anderson		
Citizens Nursing Center	M.&S.	14
St. John's Hickey Memorial Hospital	Gen.	250
Angola		
Cameron Hospitals, Inc.	Gen.	20
Argos		
Kelly Hospital	Gen.	10
Auburn		
Sanders General Hospital	Gen.	12
Dr. Bonnell M. Souder Hospital	Gen.	30
Batesville		
Margaret Mary Hospital	Gen.	75
Bedford		
Dunn Memorial Hospital	Gen.	60
Beech Grove		
St. Francis Hospital	Gen.	150
Bloomington		
Bloomington Hospital	Gen.	70
Bluffton		
Clinic Hospital	Gen.	100
Wells County Hospital	Gen.	25
Brazil		
Clay County Hospital	Gen.	47
Bremen		
Bremen Convalescent Home	Mat.	5
Clinton		
Vermillion County Hospital	Gen.	50
Columbia City		
Memorial Hospital	Gen.	18
Columbus		
Bartholomew County Hospital	Gen.	75
Connersville		
Fayette Memorial Hospital	Gen.	44
Crawfordsville		
Culver Hospital	Gen.	85
Crown Point		
James O. Parramore Hospital	T.B.	284
Decatur		
Adams County Memorial Hospital	Gen.	47
Dyer		
Mount Mercy Sanitarium	N.&M.	75
East Chicago		
St. Catherine's Hospital	Gen.	264
Elkhart		
Elkhart General Hospital	Gen.	75
Elwood		
Mercy Hospital	Gen.	45
Evansville		
Boehne Tuberculosis Hospital	T.B.	130
Clearview	N.&.M.	30
Evansville State Hospital	Ment.	1,200
Protestant Deaconess Hospital	Gen.	225
St. Mary's Hospital	Gen.	169
U. S. Marine Hospital	Gen.	95
Vanderburgh Christian Home	Mat.	20
Welborn Memorial Baptist Hospital	Gen.	100
Fort Wayne		
Irene Byron Sanatorium	T.B.	254
Lutheran Hospital	Gen.	187
Methodist Hospital	Gen.	115
St. Joseph Hospital	Gen.	290
Frankfort		
Clinton County Hospital	Gen.	40
Franklin		
Johnson County Hospital	Gen.	58
Garrett		
Sacred Heart Hospital	Gen.	42
Gary		
Methodist Hospital	Gen.	206
Patients' Hospital	Gen.	40
St. Mary's Mercy Hospital	Gen.	220
Goshen		
Goshen General Hospital	Gen.	33
Greencastle		
Putnam County Hospital	Gen.	45
Greensburg		
Decatur County Memorial Hospital	Gen.	40
Hammond		
Kuhn Clinic	EENT	8
St. Margaret Hospital	Gen.	236
Hartford City		
Blackford County Hospital	Gen.	22
Huntingburg		
Stork Hospital	Gen.	25
Huntington		
Huntington County Hospital	Gen.	50
Indianapolis		
Central State Hospital	Ment.	2,292
Flower Mission T. B. Hospital	T.B.	100
Indianapolis General Hospital	Gen.	600
Indiana University Medical Center	Gen.	584
James Whitcomb Riley Hospital	Ped.	
Robert W. Long Hospital	Gen.	
Rotary Convalescent Home	Conv.	
William H. Coleman Hospital	O.B.	
Methodist Hospital	Gen.	606
Public Health Center	V. D.	147

City	Type	Beds
Indianapolis (Cont'd.)		
St. Vincent's Hospital	Gen.	322
Sunnyside Sanatorium	T. B.	248
Veterans' Administration Hospital	Gen.	345
St. Elizabeth's Home	Mat.	18
Suemma Coleman Home	Mat.	20
Norway Sanatorium	Ment.	31
Emhardt Clinic	Gen.	36
Jeffersonville		
Clark County Memorial Hospital	Gen.	85
Kendallville		
McCray Memorial Hospital	Gen.	32
Kokomo		
St. Joseph Memorial Hospital	Gen.	81
Lafayette		
Lafayette Home Hospital	Gen.	145
St. Elizabeth Hospital	Gen.	285
William Ross Sanatorium	T.B.	27
LaGrange		
LaGrange County Hospital	M.&S.	14
LaPorte		
Fairview Hospital	Gen.	72
Holy Family Hospital	Gen.	111
Lebanon		
Witham Memorial Hospital	Gen.	70
Linton		
Freeman Greene County Hospital	Gen.	30
Logansport		
Cass County Memorial Hospital	Gen.	70
Logansport State Hospital	Ment.	2,395
St. Joseph Hospital	Gen.	60
Madison		
Kings Daughters Hospital	Gen.	50
Marion		
Marion General Hospital	Gen.	80
Veterans' Administration Hospital (See Veterans' Administration Hospital, Ind.)		
Martinsville		
Morgan County Memorial Hospital	Gen.	30
Michigan City		
Clinic Hospital	Gen.	50
Indiana Hospital for Insane Criminals	Ment.	342
Indiana State Prison Hospital	Inst.	180
St. Anthony's Hospital	Gen.	100
Warren Hospital	Gen.	22
Milan		
Whitlatch Clinic and Hospital	Gen.	40
Mishawaka		
St. Joseph Hospital	Gen.	100
Mooresville		
Comer's Sanitarium	Proct.	15
Muncie		
Ball Memorial Hospital	Gen.	217
New Albany		
St. Edward Hospital	Gen.	114
"Silvercrest" Southern Indiana Tuberculosis Hospital	T.B.	152
New Castle		
Clinic Hospital	M.&S.	19
Henry County Hospital	Gen.	82
Noblesville		
Hamilton County Hospital	Gen.	47
North Madison		
Madison State Hospital	Ment.	1,580
Oakland City		
Wood Hospital and Clinic	Gen.	10
Paoli		
Dr. Clark's Hospital	Gen.	11
Peru		
Dukes-Miami County Memorial Hospital	Gen.	60
Wabash Railroad Employees Hospital	Indus.	50
Plymouth		
Parkview Hospital	Gen.	33
Portland		
Jay County Hospital	Gen.	53
Princeton		
Gibson General Hospital	Gen.	41
Rensselaer		
Jasper County Hospital	Gen.	42
Richmond		
Reid Memorial Hospital	Gen.	130
Richmond State Hospital	Ment.	1,732
Smith-Esteb Memorial Hospital	T.B.	50
Rochester		
Woodlawn Hospital	Gen.	26
Rockville		
Indiana State Sanatorium	T.B.	250
Rome City		
Kneipp Springs Sanatorium	N.&M.	150
Rushville		
Rushville City Hospital	Gen.	12
Scottsburg		
Dr. Napper's Hospital	Mat.-Med.	10
Seymour		
Schneck Memorial Hospital	Gen.	62
Shelbyville		
W. S. Major Memorial Hospital	Gen.	48
South Bend		
Healthwin Hospital	T.B.	185
Memorial Hospital	Gen.	230
St. Joseph's Hospital	Gen.	181
Sullivan		
Mary Sherman Memorial Hospital	Gen.	50
Tell City		
Parkview Hospital	Gen.	12

City	Type	Beds
Terre Haute		
Florence Crittenden Home	Mat.	14
Hoover's Sanatorium	Gen.	14
St. Anthony's Hospital	Gen.	176
Union Hospital	Gen.	189
U. S. Penitentiary Hospital	Inst.	100
Tipton		
Emergency Hospital	Gen.	10
Union City		
Union City Hospital	Gen.	12
Valparaiso		
Porter Memorial Hospital	Gen.	57
Veterans' Administration Hospital	Ment.	2,093
Vincennes		
Good Samaritan Hospital	Gen.	109
Hillcrest Tuberculosis Hospital	T.B.	65
Wabash		
Wabash County Hospital	Gen.	45
Warsaw		
McDonald Hospital	Gen.	38
Murphy Medical Center	Gen.	25
Washington		
Daviess County Hospital	Gen.	93
Williamsport		
Community Hospital	Gen.	20
Winamac		
Carneal's Private Hospital	Gen.	7
Winchester		
Randolph County Hospital	Gen.	33
Wolflake		
Luckey Hospital	Gen.	20

RELATED INSTITUTIONS

Butlerville		
Muscatatuck State School	MeDe.	1,320
Fort Wayne		
Fort Wayne State School	MeDe.	1,912
Grace Convalescent Hospital	Conv.	33
Greencastle		
Indiana State Farm Hospital	Inst.	31
Greensburg		
Odd Fellows Home Hospital	Inst.	47
Lafayette		
Indiana State Soldiers' Home Hospital	Inst.	112
Martinsville		
Home Lawn Mineral Springs	Conv.	162
Martinsville Sanitarium	Conv.	120
New Castle		
Indiana Village for Epileptics	Epil.	1,035
Pendleton		
Indiana State Reformatory Hospital	Inst.	86
Plainfield		
Indiana Boys' School Hospital	Inst.	27

All general and special hospitals except mental are licensed under the 1945 Indiana Hospital Licensing Act by the State Board of Health through a Hospital Licensing and Regulating Council. (Personnel listed under state boards.)

The mental hospitals, according to the 1945 Mental Hospital Act, are licensed by the Indiana Council for Mental Health. (Personnel listed under state boards.)

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Monthly Bulletin

T. B. Rice, M.D., Editor

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Mr. Oden Thompson, Counselor,*** Vocational Rehabilitation Division, Box 432, Seymour, Indiana.

* North Area
** Central Area
*** South Area

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School of Nursing and Hospital, University or College with which School is connected	Location	Director, School of Nursing	Daily Patient Census
St. John's Hickey Memorial	Anderson	Sister M. Celeste, R. N.	204
*Bloomington	Bloomington	Mrs. Mary E. York, R. N.	
St. Catherine	East Chicago	Miss Marie E. Hickey, R. N.	200
**Protestant Deaconess	Evansville	Miss Adeline Aschliman, R. N.	225
St. Mary's	Evansville	Sister Georgiana, R. N.	157
Welborn Memorial Baptist	Evansville	Mrs. Madeline T. Kinney, R. N.	94
Lutheran	Fort Wayne	Miss Pauline G. Bischoff, R. N.	214
Methodist	Fort Wayne	Mrs. F. Parks Heaton, R. N.	103
St. Joseph	Fort Wayne	Sister M. Confirma, R. N.	300
Methodist	Gary	Miss Emily Stockford, R. N.	231
St. Mary Mercy	Gary	Sister M. Vitalis, R. N.	219
St. Margaret	Hammond	Sister M. Florianne, R. N.	248
**St. Mary's College—affiliated with Mt. Carmel (Holy Cross) Hospital (degree program)	Columbus, Ohio	Sister M. Amadeo, R. N.	286
**Indiana University Training School for Nurses—Indiana University Medical Center	Indianapolis	Miss Mary L. Peacock, R. N.	575
**Indianapolis General	Indianapolis	Miss Elizabeth C. Wivel, R. N.	596
**Methodist	Indianapolis	Miss E. Louise Grant, R. N.	626
St. Vincent's	Indianapolis	Sister Delphine, R. N.	373
Good Samaritan School—St. Joseph Memorial Hospital	Kokomo	Sister M. Bernadette, R. N.	125
Lafayette Home	LaFayette	Miss Lucille H. Johnson, R. N.	130
**St. Elizabeth	LaFayette	Sister M. Alvera, R. N.	233
St. Joseph	Mishawaka	Sister Mary Assumpta, R. N.	92
**Ball Memorial	Muncie	Miss Margaret I. Boal, R. N.	242
Reid Memorial	Richmond	Adele Marisco	130
Memorial Hospital of South Bend	South Bend	Elsie Norman	224
St. Joseph's	South Bend	Sister M. Cecilian, R. N.	176
St. Anthony	Terre Haute	Sister Mary Nora, R. N.	144
Union	Terre Haute	Miss Emily Gifford, R. N., Acting	183
Good Samaritan	Vincennes	Miss Martha Erdmann, R. N.	110

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Treasurer—Fred C. Baker, D.D.S., Hammond.

Master of Exhibits—W. P. McNulty, D.D.S., 3415 Fairfield Avenue, Fort Wayne.

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1125 Circle Tower Bldg.

Indianapolis 4

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Indianapolis 4

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Field Representative, Northern District—Miss Betty Malinka, 26 W. Fifth Avenue, Gary.

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PRESIDENTS OF THE INDIANA STATE MEDICAL ASSOCIATION SINCE ITS ORGANIZATION

Name and Residence	Elected	Served
Medical Convention		
*Livingston Dunlap, Indianapolis	1849	1849
Medical Society		
*William T. S. Cornett, Versailles	1849	1850
*Ashahel Clapp, New Albany	1850	1851
*George W. Mears, Indianapolis	1851	1852
*Jeremiah H. Brower, Lawrenceburg	1852	1853
*Elizur H. Deming, Lafayette	1853	1854
*Madison J. Bray, Evansville	1854	1855
*William Lomax, Marion	1855	1856
*Daniel Meeker, LaPorte	1856	1857
*Talbot Bullard, Indianapolis	1857	1858
*Nathan Johnson, Cambridge City	1858	1859
*David Hutchinson, Mooresville	1859	1860
*Benjamin S. Woodworth, Fort Wayne	1860	1861
*Theophilus Parvin, Indianapolis	1861	1862
*James F. Hibberd, Richmond	1862	1863
*John Sloan, New Albany	1863	....
*John Moffett (acting), Rushville	1863	1864
*Samuel L. Linton, Columbus	1864	....
*Wilson Lockhart (acting), Danville	1864	1865
*Myron H. Harding, Lawrenceburg	1865	1866
*Vierling Kersey, Richmond	1866	1867
*John S. Bobbs, Indianapolis	1867	1868
*Nathaniel Field, Jeffersonville	1868	1869
*George Sutton, Aurora	1869	1870
*Robert M. Todd, Indianapolis	1870	1871
*Henry P. Ayres, Fort Wayne	1871	1872
*Joel Pennington, Milton	1872	1873
*Isaac Casselberry, Evansville	1873	....
*Wilson Hobbs (acting), Knightstown	1873	1874
*Richard E. Houghton, Richmond	1874	1875
*John H. Helm, Peru	1875	1876
*Samuel S. Boyd, Dublin	1876	1877
*Luther D. Waterman, Indianapolis	1877	1878
*Louis Humphreys, South Bend	1878	....
*Benj. Newland (acting), Bedford (v.p.)	1878	1879
*Jacob R. Weist, Richmond	1879	1880
*Thomas B. Harvey, Indianapolis	1880	1881
*Marshall Sexton, Rushville	1881	1882
*William H. Bell, Logansport	1882	1883
*Samuel E. Munford, Princeton	1883	1884
*James H. Woodburn, Indianapolis	1884	1885
*James S. Gregg, Fort Wayne	1885	1886
*General W. H. Kemper, Muncie	1886	1887
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*Gonsolvo C. Smythe, Greencastle	1890	1891
*Edwin Walker, Evansville	1891	1892
*George F. Beasley, Lafayette	1892	1893
*Charles A. Daugherty, South Bend	1893	1894
*Elijah S. Elder, Indianapolis	1894	....
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*William N. Wishard, Indianapolis	1897	1898
*John C. Sexton, Rushville	1898	1899
*Walker Schell, Terre Haute	1899	1900
*George W. McCaskey, Fort Wayne	1900	1901
*Alembert W. Brayton, Indianapolis	1901	1902
*John B. Berteling, South Bend	1902	1903
Medical Association		
*Jonas Stewart, Anderson	1903	1904
*George T. MacCoy, Columbus	1904	1905
*George H. Grant, Richmond	1905	1906
*George J. Cook, Indianapolis	1906	1907
*David C. Peyton, Jeffersonville	1907	1908
*George D. Kahlo, French Lick	1908	1909
*Thomas C. Kennedy, Shelbyville	1909	1910
*Frederick C. Heath, Indianapolis	1910	1911
*William F. Howat, Hammond	1911	1912
*A. C. Kimberlin, Indianapolis	1912	1913
*John P. Salb, Jasper	1913	1914
*Frank B. Wynn, Indianapolis	1914	1915
*George F. Keiper, Lafayette	1915	1916
*John H. Oliver, Indianapolis	1916	1917
*Joseph Rilus Eastman, Indianapolis	1917	1918
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*David Ross, Indianapolis	1920	1921
William R. Davidson, Evansville	1921	1922
*Charles H. Good, Huntington	1922	1923
*Samuel E. Earp, Indianapolis	1923	1924
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Jesse E. Ferrell, Fortville	1944	1946
Floyd T. Romberger, Lafayette	1945	1947
Cleon A. Nafe, Indianapolis	1946	1948

*Deceased.

PRINCIPLES OF MEDICAL ETHICS OF THE AMERICAN MEDICAL ASSOCIATION

CHAPTER I

In General.

Section 1. The Physician's Responsibility.—A profession has for its prime object the service it can render to humanity; reward or financial gain should be a subordinate consideration. The practice of medicine is a profession. In choosing this profession an individual assumes an obligation to conduct himself in accord with its ideals.

Sec. 2. Groups and Clinics.—The ethical principles actuating and governing a group or clinic are exactly the same as those applicable to the individual. As a group or clinic is composed of individual doctors, each of whom, whether employer, employee or partner, is subject to the principles of ethics herein elaborated, the uniting into a business or professional organization does not relieve them either individually or as a group from the obligation they assume when entering the profession.

CHAPTER II

The Duties of Physicians to Their Patients.

Section 1. Patience, Delicacy and Secrecy.—Patience and delicacy should characterize all the acts of a physician. The confidences concerning individual or domestic life entrusted by a patient to a physician and the defects of disposition or flaws of character observed in patients during medical attendance should be held as a trust and should never be revealed except when imperatively required by the laws of the state. There are occasions, however, when a physician must determine whether or not his duty to society requires him to take definite action to protect a healthy individual from becoming infected, because the physician has knowledge, obtained through the confidences entrusted to him as a physician, of a communicable disease to which the healthy individual is about to be exposed. In such a case, the physician should act as he would desire another to act toward one of his own family under like circumstances. Before he determines his course, the physician should know the civil law of his commonwealth concerning privileged communications.

Sec. 2. Prognosis.—A physician should give timely notice of dangerous manifestations of the disease to the friends of the patient. He should neither exaggerate nor minimize the gravity of the patient's condition. He should assure himself that the patient or his friends have such knowledge of the patient's condition as will serve the best interests of the patient and the family.

Sec. 3. Patients Must Not Be Neglected.—A physician is free to choose whom he will serve. He should, however, always respond to any request for his assistance in an emergency or whenever temperate public opinion expects the service. Once having undertaken a case, a physician should not abandon or neglect the patient because the disease is deemed incurable; nor should he withdraw from the case for any reason until a sufficient notice of a desire to be released has been given the patient or his friends to make it possible for them to secure another medical attendant.

CHAPTER III

The Duties of Physicians to Each Other and to the Profession at Large.

ARTICLE I.—Duties to the Profession.

Section 1. Uphold Honor of Profession.—The obligation assumed on entering the profession requires the physician to comport himself as a gentleman and demands that he use every honorable means to uphold the dignity and honor of his vocation, to exalt its standards and to extend its sphere of usefulness. A physician should not base his practice on an exclusive dogma or sectarian system, for "sects are implacable despots; to accept their thraldom is to take away all liberty from one's action and thought." (Nicon, father of Galen.)

Sec. 2. Medical Societies.—In order that the dignity and honor of the medical profession may be upheld, its standards exalted, its sphere of usefulness extended, and the advancement of medical science promoted, a physician should associate himself with medical societies and contribute his time, energy and means in order that these societies may represent the ideals of the profession.

Sec. 3. Deportment.—A physician should be "an upright man, instructed in the art of healing." Consequently, he must keep himself pure in character and conform to a high standard of morals, and must be diligent and conscientious in his studies. "He should also be modest, sober, patient, prompt to do his whole duty without anxiety; pious without going so far as superstition, conducting himself with propriety in his profession and in all the actions of his life." (Hippocrates.)

Sec. 4. Advertising.—Solicitation of patients by physicians as individuals, or collectively in groups by whatsoever name these be called, or by institutions or organizations, whether by circulars or advertisements, or by personal communications, is unprofessional. This does not prohibit ethical institutions from a legitimate advertisement of location, physical surroundings and special class—if any—of patients accommodated. It is equally unprofessional to procure patients by indirection through solicitors or agents of any kind, or by indirect advertisement, or by furnishing or inspiring newspaper or magazine comments concerning cases in which the physican has been or is concerned. All other like self-laudations defy the traditions and lower the tone of any profession and so are intolerable. The most worthy and effective advertisement possible, even for a young physician, and especially with his brother physicians, is the establishment of a well-merited reputation for professional ability and fidelity. This cannot be forced, but must be the outcome of character and conduct. The publication or circulation of ordinary simple business cards, being a matter of personal taste or local custom, and sometimes of convenience, is not per se improper. As implied, it is unprofessional to disregard local customs and offend recognized ideals in publishing or circulating such cards.

It is unprofessional to promise radical cures; to boast of cures and secret methods of treatment or remedies; to exhibit certificates of skill or of success

in the treatment of diseases; or to employ any methods to gain the attention of the public for the purpose of obtaining patients.

Sec. 5. Patents and Perquisites.—It is unprofessional to receive remuneration from patents or copyrights on surgical instruments, appliances, medicines, foods, methods or procedures. It is equally unprofessional by ownership or control of patents or copyrights either to retard or to inhibit research or to restrict the benefit to patients or to the public to be derived therefrom. It is unprofessional to accept rebates on prescriptions or appliances, or perquisites from attendants who aid in the care of patients.

Sec. 6. Medical Laws—Secret Remedies.—It is unprofessional for a physician to assist unqualified persons to evade legal restrictions governing the practice of medicine; it is equally unethical to prescribe or dispense secret medicines or other secret remedial agents, or manufacture or promote their use in any way.

Sec. 7. Safeguarding the Profession.—Physicians should expose without fear or favor, before the proper medical or legal tribunals, corrupt or dishonest conduct of members of the profession. All questions affecting the professional reputation or standing of a member or members of the medical profession should be considered only before proper medical tribunals in executive sessions or by special or duly appointed committees on ethical relations. Every physician should aid in safeguarding the profession against the admission to its ranks of those who are unfit or unqualified because deficient either in moral character or education.

ARTICLE II.—Professional Services of Physicians to Each Other.

Section 1. Physicians Dependant on Each Other.—Experience teaches that it is unwise for a physician to treat members of his own family or himself. Consequently, a physician should always cheerfully and gratuitously respond with his professional services to the call of any physician practicing in his vicinity, or of the immediate family dependents of physicians.

Sec. 2. Compensation for Expenses.—When a physician from a distance is called on to advise another physician or one of his family dependants, and the physician to whom the service is rendered is in easy financial circumstances, a compensation that will at least meet the traveling expenses of the visiting physician should be proffered. When such a service requires an absence from the accustomed field of professional work of the visitor that might reasonably be expected to entail a pecuniary loss, such loss should, in part at least, be provided for in the compensation offered.

Sec. 3. One Physician to Take Charge.—When a physician or a member of his dependant family is seriously ill, he or his family should select a physician from among his neighboring colleagues to take charge of the case. Other physicians may be associated in the care of the patient as consultants.

ARTICLE III.—Duties of Physician in Consultations.

Section 1. Consultations Should Be Encouraged.—In serious illness, especially in doubtful or difficult conditions, the physician should request consultations.

Sec. 2. Consultation for Patient's Benefit.—In every consultation, the benefit to be derived by the patient is of first importance. All the physicians interested in the case should be frank and candid with the patient and his family. There never is occasion for insincerity, rivalry or envy and these should never be permitted between consultants.

Sec. 3. Punctuality.—It is the duty of a physician, particularly in the instance of a consultation, to be punctual in attendance. When, however, the consultant or the physician in charge is unavoidably delayed, the one who first arrives should wait for the other for a reasonable time, after which the consultation should be considered postponed. When the consultant has come from a distance, or when for any reason it will be difficult to meet the physician in charge at another time, or if the case is urgent, or if it be the desire of the patient, he may examine the patient and mail his written opinion, or see that it is delivered under seal, to the physician in charge. Under these conditions, the consultant's conduct must be especially tactful; he must remember that he is framing an opinion without the aid of the physician who has observed the course of the disease.

Sec. 4. Patient Referred to Specialist.—When a patient is sent to one specially skilled in the care of the condition from which he is thought to be suffering, and for any reason it is impracticable for the physician in charge of the case to accompany the patient, the physician in charge should send to the consultant by mail, or in the care of the patient under seal, a history of the case, together with the physician's opinion and an outline of the treatment, or so much of this as may possibly be of service to the consultant; and as soon as possible after the case has been seen and studied, the consultant should address the physician in charge and advise him of the results of the consultant's investigation of the case. Both these opinions are confidential and must be so regarded by the consultant and by the physician in charge.

Sec. 5. Discussions in Consultation.—After the physicians called in consultation have completed their investigations of the case, they should meet by themselves to discuss conditions and determine the course to be followed in the treatment of the patient. No statement or discussion of the case should take place before the patient or friends, except in the presence of all the physicians attending or by their common consent; and no opinions or prognostications should be delivered as a result of the deliberations of the consultants, which have not been concurred in by the consultants at their conference.

Sec. 6. Attending Physician Responsible.—The physician in attendance is in charge of the case and is responsible for the treatment of the patient. Consequently, he may prescribe for the patient at any time and is privileged to vary the mode of treatment outlined and agreed on at a consultation whenever, in his opinion, such a change is warranted. However, at the next consultation, he should state his reasons for departing from the course decided on at the previous conference. When an emergency occurs during the absence of the attending physician, a consultant may provide for the emergency and the subsequent care of the patient until the arrival of the physician in charge, but should do no more than this without the consent of the physician in charge.

Sec. 7. Conflict of Opinion.—Should the attending physician and the consultant find it impossible to agree in their view of a case another consultant should be called to the conference or the first consultant should withdraw. However, since the consultant was employed by the patient in order that his opinion might be obtained, he should be permitted to state the result of his study of the case

to the patient, or his next friend in the presence of the physician in charge.

Sec. 8. Consultant and Attendant.—When a physician has attended a case as a consultant, he should not become the attendant of the patient during that illness except with the consent of the physician who was in charge at the time of the consultation.

ARTICLE IV.—Duties of Physicians in Cases of Interference.

Section 1. Misunderstandings to Be Avoided.—The physician, in his intercourse with a patient under the care of another physician, should observe the strictest caution and reserve; should give no disingenuous hints relative to the nature and treatment of the patient's disorder; nor should the course of conduct of the physician, directly or indirectly, tend to diminish the trust reposed in the attending physician. In embarrassing situations, or wherever there may seem to be a possibility of misunderstanding with a colleague, the physician should always seek a personal interview with his fellow.

Sec. 2. Social Calls on Patient of Another Physician.—A physician should avoid making social calls on those who are under the professional care of other physicians without the knowledge and consent of the attendant. Should such a friendly visit be made, there should be no inquiry relative to the nature of the disease or comment upon the treatment of the case, but the conversation should be on subjects other than the physical condition of the patient.

Sec. 3. Services to Patient of Another Physician.—A physician should never take charge of or prescribe for a patient who is under the care of another physician, except in an emergency, until after the other physician has relinquished the case or has been properly dismissed.

Sec. 4. Criticism to Be Avoided.—When a physician does succeed another physician in the charge of a case, he should not make comments on or insinuations regarding the practice of the one who preceded him. Such comments or insinuations tend to lower the esteem of the patient for the medical profession and so react against the critic.

Sec. 5. Emergency Cases.—When a physician is called in an emergency and finds that he has been sent for because the family attendant is not at hand, or when a physician is asked to see another physician's patient because of an aggravation of the disease, he should provide only for the patient's immediate need and should withdraw from the case on the arrival of the family physician after he has reported the condition found and the treatment administered.

Sec. 6. When Several Physicians are Summoned.—When several physicians have been summoned in a case of sudden illness or of accident, the first to arrive should be considered the physician in charge. However, as soon as the exigencies of the case permit, or on the arrival of the acknowledged family attendant or the physician the patient desires to serve him, the first physician should withdraw in favor of the chosen attendant; should the patient or his family wish some one other than the physician known to be the family physician to take charge of the case the patient should advise the family physician of his desire. When, because of sudden illness or accident, a patient is taken to a hospital, the patient should be returned to the care of his known family physician as soon as the condition of the patient and the circumstances of the case warrant this transfer.

Sec. 7. A Colleague's Patient.—When a physician is requested by a colleague to care for a patient during his temporary absence, or when, because of an emergency, he is asked to see a patient of a colleague, the physician should treat the patient in the same manner and with the same delicacy as he would have one of his own patients cared for under similar circumstances. The patient should be returned to the care of the attending physician as soon as possible.

Sec. 8. Relinquishing Patient to Regular Attendant.—When a physician is called to the patient of another physician during the enforced absence of that physician, the patient should be relinquished on the return of the latter.

Sec. 9. Substituting in Obstetric Work.—When a physician attends a woman in labor in the absence of another who has been engaged to attend, such physician should resign the patient to the one first engaged, upon his arrival; the physician is entitled to compensation for the professional services he may have rendered.

ARTICLE V.—Differences Between Physicians.

Section 1. Arbitration.—Whenever there arises between physicians a grave difference of opinion which cannot be promptly adjusted, the dispute should be referred for arbitration to a committee of impartial physicians, preferably the Board of Censors of a component county society of the American Medical Association.

ARTICLE VI.—Compensation.

Section 1. Limits of Gratuitous Service.—The poverty of a patient and the mutual professional obligation of physicians should command the gratuitous services of a physician. But endowed institutions and organizations for mutual benefit, or for accident, sickness and life insurance, or for analogous purposes, have no claim upon physicians for unremunerated services.

Sec. 2. Conditions of Medical Practice.—It is unprofessional for a physician to dispose of his services under conditions that make it impossible to render adequate service to his patient or which interfere with reasonable competition among the physicians of a community. To do this is detrimental to the public and to the individual physician, and lowers the dignity of the profession.

Sec. 3. Contract Practice.—By the term "contract practice" as applied to medicine is meant the carrying out of an agreement between a physician or a group of physicians, as principles or agents, and a corporation, organization, political subdivision or individual, to furnish partial or full medical services to a group or class of individuals on the basis of a fee schedule, or for a salary or a fixed rate per capita.

Contract practice **per se** is not unethical. However, certain features or conditions if present make a contract unethical, among which are: 1. When there is solicitation of patients, directly or indirectly. 2. When there is underbidding to secure the contract. 3. When the compensation is inadequate to assure good medical service. 4. When there is interference

with reasonable competition in a community. 5. When free choice of a physician is prevented. 6. When the conditions of employment make it impossible to render adequate service to the patients. 7. When the contract because of any of its provisions or practical results is contrary to sound public policy. The phrase "free choice of physician," as applied to contract practice, is defined to mean that degree of freedom in choosing a physician which can be exercised under usual conditions of employment between patient and physician when no third party has a valid interest or intervenes. The interjection of a third party who has a valid interest or who intervenes does not **per se** cause a contract to be unethical. A "valid interest" is one where, by law or necessity, a third party is legally responsible either for cost of care or for indemnity. "Intervention" is the voluntary assumption of partial or full financial responsibility for medical care. Intervention shall not proscribe endeavor by component or constituent medical societies to maintain high quality of service rendered by members serving under approved sickness service agreements between such societies and governmental boards or bureaus and approved by the respective societies.

Each contract should be considered on its own merits and in the light of surrounding conditions. Judgment should not be obscured by immediate, temporary or local results. The decision as to its ethical or unethical nature must be based on the ultimate effect for good or ill on the people as a whole.

Sec. 4. Commissions.—When a patient is referred by one physician to another for consultation or for treatment, whether the physician in charge accompanies the patient or not, it is unethical to give or to receive a commission by whatever term it may be called or under any guise or pretext whatsoever.

Sec. 5. Direct Profit to Lay Groups.—It is unprofessional for a physician to dispose of his professional attainments or services to any lay body, organization, group or individual, by whatever name called, or however organized, under terms or conditions which permit a direct profit from the fees, salary or compensation received to accrue to the lay body or individual employing him. Such a procedure is beneath the dignity of professional practice, is unfair competition with the profession at large, is harmful alike to the profession of medicine and the welfare of the people, and is against sound public policy.

CHAPTER IV

The Duties of the Profession to the Public.

Section 1. Physicians as Citizens.—Physicians, as good citizens and because their professional training specially qualifies them to render this service, should give advice concerning the public health of the community. They should bear their full part in enforcing its laws and sustaining the institutions that advance the interests of humanity. They should cooperate especially with the proper authorities in the administration of sanitary laws and regulations. They should be ready to counsel the public on subjects relating to sanitary police, public hygiene and legal medicine.

Sec. 2. Public Health.—Physicians, especially those engaged in public health work, should enlighten the public regarding quarantine regulations; on the location, arrangement and dietaries of hospitals, asylums, schools, prisons and similar institutions; and concerning measures for the prevention of epidemic and contagious diseases. When an epidemic prevails, a physician must continue his labors for the alleviation of suffering people, without regard to the risk of his own health or life or to financial return. At all times, it is the duty of the physician to notify the properly constituted public health authorities of every case of communicable disease under his care, in accordance with the laws, rules and regulations of the health authorities of the locality in which the patient is.

Sec. 3. Public Warned.—Physicians should warn the public against the devices practiced and the false pretensions made by charlatans which may cause injury to health and loss of life.

Sec. 4. Pharmacists.—By legitimate patronage, physicians should recognize and promote the profession of pharmacy; but any pharmacist, unless he be qualified as a physician, who assumes to prescribe for the sick, should be denied such countenance and support. Moreover, whenever a druggist or pharmacist dispenses deteriorated or adulterated drugs, or substitutes one remedy for another designated in a prescription, he thereby forfeits all claims to the favorable consideration of the public and physicians.

CONCLUSION

While the foregoing statements express in a general way the duty of the physician to his patients, to other members of the profession and to the profession at large, as well as of the profession to the public, it is not to be supposed that they cover the whole field of medical ethics, or that the physician is not under many duties and obligations besides these herein set forth. In a word, it is incumbent on the physician that under all conditions, his bearing toward patients, the public and fellow practitioners should be characterized by a gentlemanly deportment and that he constantly should behave toward others as he desires them to deal with him. Finally, these principles are primarily for the good of the public, and their enforcement should be conducted in such a manner as shall deserve and receive the endorsement of the community.

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CONSTITUTION AND BY-LAWS OF THE INDIANA STATE MEDICAL ASSOCIATION

ARTICLE I—NAME OF THE ASSOCIATION

The name and title of this organization shall be the Indiana State Medical Association.

ARTICLE II—PURPOSES OF THE ASSOCIATION

The purposes of this Association shall be to federate and bring into one compact organization the entire medical profession of the State of Indiana, and to unite with similar societies of other states to form the American Medical Association; to extend medical knowledge and advance medical science; to elevate the standard of medical education and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to protect them against imposition; and to enlighten and direct public opinion in regard to the great problems of state medicine, and public health, so that the profession shall become more capable and honorable within itself and more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life.

ARTICLE III—COMPONENT SOCIETIES

Component societies shall consist of those county medical societies which hold charters from this Association.

ARTICLE IV—COMPOSITION OF THE ASSOCIATION

Section 1—This Association shall consist of Members, Delegates, Guests, and Associate and Honorary Members.

Sec. 2—*Members*—The members of this Association shall be the members of the component county medical societies. Membership in a county medical society on a basis not including membership in the Indiana State Medical Association is not recognized.

Sec. 3—*Delegates*—Delegates shall be those members who are elected in accordance with this Constitution and By-Laws to represent their respective component societies in the House of Delegates of this Association.

Sec. 4—*Associate Members*—Members of the Indiana State Dental Association in good standing are, by virtue of their membership therein, made associate members of the Indiana State Medical Association.

Sec. 5—*Honorary Members*—Honorary members shall consist of representative teachers and students of science allied to medicine and of physicians and surgeons of distinction not members of the Indiana State Medical Association, who may by vote of the House of Delegates be elected to honorary membership; and any physician of the State of Indiana who has attained the age of seventy-five years and has held membership in the Indiana State Medical Association for twenty years or more may be elected to honorary membership by vote of the House of Delegates, provided his name be proposed for such honorary membership by the county medical society of which such physician is a member.

Sec. 6—*Guests*—Any distinguished physician not a resident of this state who is a member of his own State Association may become a guest during any Annual Session on invitation of the officers of this Association, and shall be accorded the privilege of participating in all of the scientific work for that session.

ARTICLE V—HOUSE OF DELEGATES

The House of Delegates shall be the legislative and business body of the Association and shall consist of (1) Delegates elected by the component county societies; (2) the Councilors; (3) the ex-Presidents of the Indiana State Medical Association; and (4) *ex officio* the President, the President-elect, the Executive Secretary, the Treasurer of this Association, and the delegates to the American Medical Association, all without power to vote, except in case of a tie vote, when the President shall cast the deciding vote.

ARTICLE VI—COUNCIL

The Council shall consist of (1) the Councilors, and (2) *ex officio* the President, President-elect, Executive Secretary, and Treasurer. Besides its duties mentioned in the By-Laws, it shall constitute the Board of Trustees of this organization, having full charge and control of all the property of the Association. It shall have full authority and power of the House of Delegates between sessions of the House of Delegates, except that it shall not make changes in the laws governing the Association nor exercise legislative functions, except as stated in the By-Laws, and at all times shall be the finance committee of the Association. Five Councilors shall constitute a quorum.

ARTICLE VII—SECTIONS AND DISTRICT SOCIETIES

The House of Delegates may provide for a division of the scientific work of the Association into appropriate sections and for the organization of such Councilor District Societies as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies.

ARTICLE VIII—SESSIONS AND MEETINGS

Section 1—The Association shall hold an Annual Session during which there shall be held daily general meetings and such section meetings as may be provided for, all of which shall be open to all registered members and guests.

Sec. 2—The time and place for holding each Annual Session shall be fixed by the House of Delegates at the preceding Annual Session.

Sec. 3—Special sessions of either the Association or the House of Delegates shall be called by the President on petition of twenty delegates or fifty members.

ARTICLE IX—OFFICERS

Section 1—The officers of this Association shall be a President, a President-elect, an Executive Secretary, a Treasurer, and thirteen Councilors, each of whom shall be a member, except the Executive Secretary, who need not necessarily be either a physician or a member.

Sec. 2—The officers, except the Councilors and the Executive Secretary, whose election has been provided for hereinafter, shall be elected annually. The terms of elected Councilors shall be for three years

and approximately one-third of the number shall be elected annually. All of these officers shall serve until their successors are elected and installed.

Sec. 3—The officers of this Association shall be elected by the House of Delegates on the morning of the last day of the Annual Session, and no person shall be elected to any such office who is not in attendance on that Annual Session and who has not been a member of the Association for the preceding two years.

Sec. 4—The Councilors shall be elected by the respective district societies, provided that if any district fails to meet and elect its Councilor by the time of expiration of the incumbent's term of office, the Executive Secretary of the Association shall cause a special meeting to be called by said district society for the purpose of such election.

ARTICLE X—RECIPROCITY OF MEMBERSHIP WITH OTHER STATE SOCIETIES

In order to broaden professional fellowship, this Association is ready to arrange with other State Medical Associations for an interchange of certificates of membership so that members moving from one state to another may avoid the formality of re-election.

ARTICLE XI—FUNDS AND EXPENSES

Funds shall be raised by an equal per capita assessment on each component society. The amount of the assessment shall be fixed by the House of Delegates. Funds also may be raised by voluntary contributions, from the Association's publications, and in any other manner approved by the House of Delegates. Funds may be appropriated by the House of Delegates to defray the expenses of the Association, for publication, and for such other purposes as will promote the welfare of the profession. All motions and resolutions appropriating funds must be referred to the Council for approval before final action is taken thereon.

ARTICLE XII—REFERENDUM

Section 1—A General Meeting of the Association may, by a two-thirds vote of the members present, order a general referendum on any question pending before the House of Delegates, and when so ordered the House of Delegates shall submit such question to the members of the Association, who may vote by mail or in person, and if the members voting shall comprise a majority of all the members of the Association, a majority of such vote shall determine the question and be binding on the House of Delegates.

Sec. 2—The House of Delegates may, by a two-thirds vote of its own members, submit any question before it to a general referendum, as provided in the preceding section, and the result shall be binding on the House of Delegates.

ARTICLE XIII—THE SEAL

The Association shall have a common Seal, with power to break, change or renew the same at pleasure.

ARTICLE XIV—AMENDMENTS

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates present at any Annual Session, provided that such amendment shall have been presented in open meeting at the previous Annual Session, and that it shall have been published twice during the year in THE JOURNAL of this Association.

BY-LAWS

CHAPTER I—MEMBERSHIP

Section 1—Any physician who is a member in good standing of a component county society and who has paid to this Association his annual dues is a member in good standing of the Indiana State Medical Association.

Sec. 2—No person who is under sentence of suspension or expulsion from a component society, or whose name has been dropped from its roll of members, shall be entitled to any of the rights or benefits of this Association, nor shall he be permitted to take part in any of its proceedings until he has been relieved of such disability.

Sec. 3—Each member in attendance at the Annual Session shall register by indicating the component society of which he is a member. When his right to membership has been verified, by reference to the roster of his society, he shall receive a badge, which shall be evidence of his right to all the privileges of membership at that session. No member shall take part in any of the proceedings of an Annual Session until he has complied with the provisions of this section.

CHAPTER II—GENERAL MEETINGS

Section 1—All registered members may attend and participate in the proceedings and discussions of the General Meetings and the meetings of the sections. The General Meetings shall be presided over by the President or by the President-elect, and before them shall be delivered the address of the President and the orations, unless the Committee on Scientific Work, with the sanction and approval of the officers, shall arrange otherwise.

Sec. 2—The General or Section Meetings may recommend to the House of Delegates the appointment of committees or commissions for scientific investigation of special interest and importance to the profession and public.

Sec. 3—No address or paper before the Association, except those of the President and orators, shall occupy more than twenty minutes in its delivery; and no member shall speak longer than five minutes nor more than once on any subject, except by unanimous consent, except the first discussant, who shall be allowed ten minutes.

Sec. 4—All papers read before the Association or any of the sections shall become its property and shall not be published in any but the official publications of this Association, except by consent of the officers and the Editorial Board of this Association. Each paper shall be deposited with the Executive Secretary when read.

Sec. 5—The Indiana State Medical Association shall appropriate from its funds the sum of Five Hundred Dollars ($500) annually for the entertainment of its members and guests, this money to be expended at the direction of the President, Executive Secretary, and Treasurer of the State Association, and the Chairman of the Entertainment Committee, who is appointed annually by the President of the Associa-

tion. All money in excess of that expended for actual expenses incurred at that session is to revert each year to the treasury of the State Association.

CHAPTER III—SECTIONS

Section 1—During the Annual Session the Association may meet in the following sections:

a. Surgical.

b. Medical.

c. Eye, Ear, Nose, and Throat.

d. Anesthesia.

e. Any other sections that hereafter may be provided for by the House of Delegates.

Sec. 2—The officers of each section shall be a Chairman, a Vice-Chairman, and a Secretary, and they shall preside over the meetings of the sections and shall be responsible to the Committee on Scientific Work for the section speakers and papers.

Sec. 3—The election of officers of the sections shall be the first order of business of the last meeting of the sections during the Annual Session.

Sec. 4—No section meeting shall be allowed to conflict with a general meeting.

CHAPTER IV—HOUSE OF DELEGATES

Section 1—The House of Delegates shall meet the day before or during that fixed as the first day of the scientific meeting of the Annual Session. It may adjourn from time to time as may be necessary to complete its business, provided that its hours shall conflict as little as possible with the General or Section Meetings. It shall meet on the morning of the last day of the Annual Session for the election of officers for the ensuing year, and for the completion of any business previously introduced. The order of business shall be arranged as a separate section of the program.

Sec. 2—Each component county society shall be entitled to send to the House of Delegates each year one delegate for every fifty members and one for each major fraction thereof; but, irrespective of the number of members, each component society which has made its annual report and paid its assessments, as provided in this Constitution and By-Laws, shall be entitled to one delegate, except that where a component society is made up of physicians of more than one county, each county shall be entitled to at least one delegate to be selected by the physicians residing in such county. The names of duly elected delegates and alternates from each component society shall be sent to the Executive Secretary of this Association annually on or before June first prior to the Annual Session at which such delegates are to serve. No one shall be entitled to a seat in the House of Delegates unless his credentials as a delegate or alternate, properly signed by the President and Secretary of his county society, be presented to the Committee on Credentials at the time of the Annual Session. If any component county medical society is without representation at the end of the roll call, then the members registered in attendance from that county may select from their number a delegate to serve until the regular delegate or alternate appears, and any delegate so named must receive a vote of affirmation from the House of Delegates before he can be seated.

Sec. 3—Twenty delegates shall constitute a quorum.

Sec. 4.—It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body.

Sec. 5—It shall divide the state into Councilor Districts, specifying what counties each district shall include, and when the best interests of the Association and profession will be promoted thereby, organize in each district a medical society, and all members of component county societies, and no others, shall be members of such district societies.

Sec. 6—It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates. Such comittees shall report to the House of Delegates, and the members of such committees may be present and participate in the debate on their reports.

Sec. 7—It shall approve all memorials and resolutions issued in the name of the Association before the same shall become effective.

Sec. 8—Funds may be appropriated by the House of Delegates, subject to approval by the Council, for such purposes as will promote the welfare of the Association and the profession.

Sec. 9—At the first meeting the President shall appoint from among the members of the House of Delegates, Reference Committees, as hereinafter provided for, and any other committees considered by him necessary to expedite the business of the Association.

CHAPTER V—ELECTION OF OFFICERS

Section 1—The election of officers shall be the first order of business of the House of Delegates after the reading of the minutes on the morning of the last day of the Annual Session.

Sec. 2—All elections shall be by ballot, and a majority of the votes cast shall be necessary to elect. In case no nominee receives a majority on the first ballot, the nominee receiving the lowest number of votes shall be dropped and a new ballot taken.

Sec. 3—Any person known to have solicited votes for or sought any office within the gift of this Association shall be ineligible for any office for two years.

Sec. 4—The term of office, unless otherwise specified, shall be for the fiscal year following the date of election.

CHAPTER VI—DUTIES OF OFFICERS

Section 1—The President shall preside at all General Meetings of the Association and of the House of Delegates; shall appoint all committees not otherwise provided for; he shall deliver an annual address at such time as may be arranged by the Scientific or Program Committee, and perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the state during his term of office, and as far as practicable, shall visit by appointment the various sections of the state and assist the Councilors in building up the county societies and in making their work more practical and useful.

Sec. 2—The President-elect's term of office shall be for one year, at the completion of which he succeeds

to the presidency. While President-elect, he shall assist the President in the discharge of his duties. In the event of the President's death, resignation or removal, the President-elect shall succeed him in office.

Sec. 3—The Treasurer shall give bond at the expense of the Association in such an amount as shall be required by the Council. He shall demand and receive all funds due the Association, except accounts due THE JOURNAL in the conduct of its business, together with bequests and donations. He shall pay money out of the treasury only on a written order by the President, countersigned by the Chairman of the Council. He shall present to the House of Delegates annually a report of the receipts and expenditures, and the state of the funds in his hands, and shall subject his accounts to such examination as the House of Delegates may order.

Sec. 4—The Executive Secretary shall attend the General Meetings of the Association, and the meetings of the House of Delegates and the Council, and shall keep minutes of their respective proceedings in separate record books. He shall be Secretary of all committees of the Association, assist them in the performance of their duties and keep a record of their proceedings. He shall, under instructions from the Bureau or Committee on Publicity, issue and send to lay publications such educational articles as may be prepared and authorized for general publication, and secure and assign medical speakers to address (on invitation) lay organizations on subjects pertaining to individual or community health. He also shall, whenever requested, assist any of the component societies of the Association in securing speakers or otherwise preparing a program for special meetings; he shall at all times hold himself in readiness to advise and aid, so far as practicable, any and all officers or committees of the Association in the performance of their duties or to carry out any of the purposes or policies of the Association. He shall be custodian of all record books and papers belonging to the Association, except such as properly belong to the Treasurer, and shall keep account of and promptly turn over to the Treasurer all funds of the Association which come into his hands. He shall be bonded at the expense of the Association in such an amount as shall be required by the Council. He shall provide for the registration of the members and delegates at the Annual Session. He shall, with the cooperation of the secretaries of the component societies, keep a card-index register of all the legal practitioners of the state by counties, noting on each his status in relation to his county society, and, on request, shall transmit a copy of this list to the American Medical Association. He shall report promptly memberships and proceedings or reports of the House of Delegates, the Council, or any committees of the Association to the Editor of THE JOURNAL for publication. He shall aid the Councilors in the organization and improvement of the county societies and in the extension of the power and usefulness of this Association. He shall conduct the official correspondence, notifying members of meetings, officers of their election, and committees of their appointment and duties. He shall employ such assistants as may be ordered by the Council, and shall make an annual report to the House of Delegates. He shall supply each component society with the necessary blanks for making their annual reports; shall keep an account with the component societies, charging against each society its assessments, collect the same, and at once turn it over to the Treasurer. Acting with the Committee on Scientific Work and the Editor of THE JOURNAL, he shall prepare and issue all programs. The amount of his salary shall be fixed by the Executive Committee on approval of the Council.

Sec. 5—The necessary expenses of the above officers incurred in the line of duty herein imposed may be allowed by the Council, but excepting the Executive Secretary, this shall not include the expense of attending the Annual Session.

CHAPTER VII—COUNCIL

Section 1.—The Council shall meet as follows: 1. January, April and July of each year. 2. On the day preceding the first day for the scientific meetings of the Annual Session of the Association. 3. On the last day of the Annual Session of the Association after the adjournment of the House of Delegates. 4. At such other times as necessity may require, subject to the call of the Chairman, or on petition of three Councilors. It shall hold no meeting that will conflict with any meeting of the House of Delegates. It shall elect a Chairman; and a Clerk, who, in the absence of the Executive Secretary of the Association, shall keep a record of its proceedings. It shall, through its Chairman, make an annual report to the House of Delegates. Five Councilors shall constitute a quorum for the transaction of business.

Sec. 2—Each Councilor shall be organizer, peacemaker, and censor for his district. He shall visit the counties in his district at least once a year for the purpose of organizing component societies where none exist; for inquiring into the condition of the profession, and for improving and increasing the zeal of the county societies and their members. He shall make an annual report of his work and of the condition of the profession of each county in his district, the same to be published in the number of THE JOURNAL which is issued immediately preceding the Annual Session, and the report should be approved by the House of Delegates, with such recommendations as seem indicated. The necessary expenses incurred by such Councilor in the line of the duties herein imposed may be allowed by the Council on a properly itemized statement, but this shall not be construed to include his expense in attending the Annual Session of the Association.

Sec. 3—The Council shall, through its officers and otherwise, give diligent attention to and foster the scientific work and spirit of the Association, and shall study and strive constantly to make each Annual Session a stepping stone to future ones of higher interest.

Sec. 4—The Council shall, in connection with the House of Delegates, consider and advise as to the interests of the profession and of the public in those important matters wherein it is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation and to diffuse popular information in relation thereto.

Sec. 5—The Council shall make careful inquiry into the condition of the profession of each county in the state and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse among physicians of the same locality and shall continue these efforts until every physician in every county of the state who can be made reputable has been brought under medical society influence.

Sec. 6—The Council shall encourage postgraduate and research work, as well as home study, and shall

endeavor to have the results utilized and intelligently discussed in the county societies.

Sec. 7—The Council shall, upon application, provide and issue charters to county societies organized to conform to the spirit of this Constitution and By-Laws.

Sec. 8—In sparsely settled sections it shall have authority to organize the physicians of two or more counties into societies to be designated by hyphenating the names of two or more counties so as to distinguish them from district and other classes of societies; and these societies, when organized and chartered, shall be entitled to all the privileges and representation provided herein for county societies, until such counties may be organized separately.

Sec. 9—The Council shall be the Board of Censors of the Association. It shall consider all questions involving the rights and standings of members whether in relation to other members, to the component societies, or to this Association. All questions of an ethical nature brought before the House of Delegates or the General or Section Meetings shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members of component societies on which an appeal is taken from the decision of an individual Councilor, and its decision in all such matters shall be final.

Sec. 10—The Council shall provide for and superintend all publications of the Association, and shall have authority to appoint an editor and such assistants as it deems necessary, and fix the amounts of their salaries. The proceedings of the Council for the year shall be reported to the House of Delegates at the Annual Session and be published in the number of THE JOURNAL which immediately precedes the Annual Session.

Sec. 11—In the interim between the sessions of this Association the Council shall be the executive body of the Association with full power to fill vacancies or transact any business that emergencies or the welfare of the Association may require.

Sec. 12—The Council shall employ an Executive Secretary, who need not be a physician nor a member of the Association.

Sec. 13—The Council shall elect two members of the Association, who, with the President, the President-elect, and the Chairman of the Council, shall constitute and be known as the Executive Committee.

CHAPTER VIII—STANDING COMMITTEES

Section 1—The standing committees shall be as follows:

The Executive Committee.
A Committee on Arrangements.
A Committee on Scientific Work.
A Committee on Public Policy and Legislation.
A Committee on Publicity.
A Committee on Industrial and Civic Relationship.
A Committee on Medical Education and Hospitals.
A Committee on Budget.
A Committee on Public Relations.

Such committees, except the Executive Committee, which is elected by the Council, and the Committee on Budget, the membership of which is hereinafter provided for, shall be appointed by the President of the Association, and the President and Executive Secretary of the Association shall be *ex officio* members of all standing committees. The President also may appoint such other committees as may be necessary. No member of the Indiana State Medical Association shall serve as a member of two major committees in any one year.

Sec. 2—*The Executive Committee,* consisting of five members as heretofore provided for, shall meet regularly once a month with the Executive Secretary to plan and execute such work as may be necessary for the welfare of the Association and the conduct of the Executive Secretary's office. It shall constitute the Medical Defense Committee of the Association and shall have full authority governing all matters pertaining to the medical defense features of this Association, and shall be governed by the rules and regulations concerning such features as provided for in the By-Laws of this Constitution. It shall represent the Council during intervals between meetings of that body and shall report its doings to the Council.

Sec. 3—*The Committee on Arrangements,* with the advice and assistance of the Executive Secretary, shall provide suitable accommodations for the meetings of the Association, including the House of Delegates, Council, and of their respective committees, the scientific and commercial exhibits, and in conjunction with the Executive Secretary shall have general charge of all the arrangements. Its Chairman shall report an outline of the arrangements to the Executive Secretary of the Association for publication in THE JOURNAL and in the official program, and shall make additional announcements during the session as occasion may require. The arrangements for and the character of any and all commercial exhibits must meet with the approval of the Executive Committee of the Association.

Sec. 4—*The Committee on Scientific Work* shall consist of three members, one to serve one year, one to serve two years, and one to serve three years, thereafter one to be appointed each year for a period of three years; the senior member to be Chairman.

The President, the officers of the sections, and the Executive Secretary are to be *ex officio* members.

Liaison shall be maintained between the Committee on Scientific Work and the scientific exhibitors. Thirty days previous to each Annual Session it shall prepare and issue a program announcing the order in which papers, discussions, and other business shall be presented. Such program and all announcements concerning the Annual Session shall be published in the number of THE JOURNAL of the Association that is issued just prior to the Annual Session.

Sec. 5—*The Committee on Public Policy and Legislation* shall consist of three members and the President and Executive Secretary of the Association. Under the direction of the House of Delegates it shall represent the Association in securing and enforcing legislation in the interest of public health, medical education, scientific medicine and the economic welfare of the medical profession. It shall keep in touch with professional and public opinion, shall endeavor to shape legislation so as to secure the best results for the whole people, and to protect the medical profession, and shall strive to organize professional influence so as to promote the general good of the community in local, state and national affairs and elections.

Sec. 6—*The Committee on Publicity* shall consist of five members, two of which shall be the President and the Executive Secretary of the Association. It shall be responsible for the dissemination of information concerning individual and community health to the lay public through articles prepared for publication in lay publications, or for addresses or talks delivered before lay audiences under the

authority of the Association, and shall in every way seek to give the lay public a better knowledge and understanding of the aims and objects of scientific medicine.

Sec. 7—*The Committee on Industrial and Civic Relationship* shall consist of three members appointed by the President, each to serve for three years, one member to be appointed each year. The duties of the committee shall be: To study, gather facts and become intimately acquainted with all and every movement wherever and by whomsoever agitated, proposed, enacted or attempted to be enacted, that has as its secret or avowed object the providing of social, commercial or industrial medical insurance for the public, civic or commercial employers, or for the providing of medical or surgical care to a group or groups of individuals, singly or collectively, or which in any manner affects the economic and financial status of the members of this Association either individually or collectively; to represent this Association in efforts to secure greater cooperation and a mutual understanding between medical men and employers of labor or their insurance carriers concerning the rendering of professional services in industrial cases and the amount and character of compensation therefor; to devise and advise, whenever necessary, intelligent action on the part of this Association upon these questions; and to report annually, and in writing, its findings, recommendations and information to the House of Delegates. Should occasion arise in the interval between the stated meetings of the House of Delegates when prompt action becomes imperative, the committee is to present its findings to the Chairman of the Council and President, who are to proceed in such emergencies as empowered by this Constitution and By-Laws.

Sec. 8—*The Committee on Medical Education and Hospitals* shall consist of three members appointed by the President, each to serve for three years, one member to be appointed each year. The duties of this committee shall be to cooperate with the authorities of the Indiana University School of Medicine in efforts to improve the educational standards of the state as they pertain to the practice of medicine; to act in conjunction with the members of the Council in providing postgraduate clinics or teaching for the various Councilor medical districts of the state; to select one of its own members as a delegate to the yearly Conference on Medical Education and Hospitals of the American Medical Association; and to cooperate with the corresponding Council of the American Medical Association.

Sec. 9—*The Committee on Budget* shall consist of the officers, the retiring President and the chairman of the Council. The duty of this committee shall be to prepare a budget for the ensuing year, and all expenditures of the Association, except those otherwise provided for by the Constitution and By-Laws, shall be governed by the budget. No expense not provided for in the budget shall be incurred by any officer or committee. A committee or an officer may submit a request for funds to meet unusual expenses, which request may be granted by two-thirds vote of the Budget Committee.

Sec. 10—*The Committee on Public Relations* shall have as its duty to act as liaison between the Indiana State Medical Association, the Indiana University School of Medicine, the Indiana State Board of Health, and the public; to hear and investigate complaints, to gather facts, and so far as it may be in their province, to correct existing faults and incorrect information; to further cooperation; and to obtain proper and legitimate publicity through the Publicity Committee of all matters of public interest concerning the above.

CHAPTER IX—REFERENCE COMMITTEES

Section 1—Immediately after the organization of the House of Delegates at each Annual Session, the President shall appoint from the members of the House, reference committees to serve during the session at which they are appointed. Selection of these reference committees shall be made by the President and his advisors at a time sufficiently in advance of the Annual Session, so that the roster of the committees may be published in THE JOURNAL and/or Hand Book prior to said Annual Session. Such publication shall constitute notification of appointment of the various delegates to their respective committees. Absenteeism shall be reported immediately to the President, who then will substitute from among those present. Each committee shall consist of five members, the chairman to be specified by the President. To these committees shall be referred all reports, resolutions, measures and propositions presented to the House of Delegates, except such matters as properly come before the Council, and the recommendations of these committees shall be submitted to the next meeting of the House of Delegates for acceptance in the original or modified form or for rejection.

Sec. 2—The following reference committees are hereby constituted:

(1) A Committee on Sections and Section Work to which shall be referred all matters relating to the sections or section work. The members of the Committee on Scientific Work shall be members *ex officio* of this committee.

(2) A Committee on Rules and Order of Business to which shall be referred all matters regarding rules governing the action, methods of procedure, and order of business of the House of Delegates.

(3) A Committee on Medical Education and Hospitals to which shall be referred all matters relating to medical education and medical colleges and hospitals. The members of the standing committee on Medical Education and Hospitals shall be *ex officio* members of this committee.

(4) A Committee on Public Policy and Legislation to which shall be referred all matters relating to state and national legislation, and memorials to the legislature, to the United States Congress, to the Governor of the state, or to the President of the United States. The members of the standing committee on Public Policy and Legislation shall be *ex officio* members of this committee.

(5) A Committee on Publicity to which shall be referred all matters relating to publicity. The members of the standing committee on Publicity shall be *ex officio* members of this committee.

(6) A Committee on Hygiene and Public Health to which shall be referred all matters relating to hygiene and public health.

(7) A Committee on Amendments to the Constitution and By-Laws to which shall be referred all proposed amendments to the Constitution and By-Laws.

(8) A Committee on Reports of Officers to which shall be referred the address of the President and the reports of the Executive Secretary, Treasurer, and the Council.

(9) A Committee on Credentials to which shall be referred all questions regarding registration and the credentials of delegates.

(10) A Committee on Miscellaneous Business to which shall be referred all business not otherwise disposed of.

CHAPTER X—COUNTY SOCIETIES

Section 1—All county societies now in affiliation with this Association or those which may hereafter

be organized in this state, which have adopted principles of organization not in conflict with this Constitution and By-Laws, shall, on application, receive a charter from and become a component part of this Association. The acceptance or retention of this charter shall be regarded as a pledge on the part of the said component society to conduct itself in harmony with the letter and/or spirit of this Constitution and By-Laws and other rules and resolutions of this Association.

Sec. 2—Charters shall be issued only upon approval of the Council and shall be signed by the President and Executive Secretary of this Association. The Council shall have authority to revoke the charter of any component society whose actions are in conflict with the letter and/or spirit of this Constitution and By-Laws.

Sec. 3—Only one component medical society shall be chartered in any county. Where more than one county society exists, friendly overtures and concessions shall be made, with the aid of the Councilor for the district if necessary, and all of the members brought into one organization. In case of failure to unite, an appeal may be made to the Council, which shall decide what action shall be taken.

Sec. 4—Each county society shall be judge of the qualifications of its own members, but, as such societies are the only portals to this Association and to the American Medical Association, every reputable and legally registered physician who does not practice or claim to practice, nor lend his support to, any exclusive system of medicine, shall be entitled to membership. Before a charter is issued to any county society, full and ample notice and opportunity shall be given to every physician in the county to become a member.

Sec. 5—Any physician who may feel aggrieved by the action of the society of his county in refusing him membership, or in suspending or expelling him, shall have the right to appeal to the Council, and its decision shall be final.

Sec. 6—In hearing appeals the Council may admit oral or written evidence as in its judgment will best and most fairly present the facts, but in case of every appeal, both as a board and as individual Councilors in district and county work, efforts at conciliation and compromise shall precede all such hearings.

Sec. 7—When a member in good standing in a component society moves to another county in this state, his name, on request, shall be transferred without cost to the roster of the county society into whose jurisdiction he moves, provided the transfer is approved by majority vote of the membership of said society to which the membership is proposed.

Sec. 8—A physician living on or near a county line may hold his membership in that county most convenient for him to attend, on permission of the society in whose jurisdiction he has his office or has the major part of his practice.

Sec. 9—Each component society shall have general direction of the affairs of the profession in its county, and its influence shall be constantly exerted for bettering the scientific, moral and material condition of every physician in the county; and systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified and honorable physician in the county.

Sec. 10—At the annual business meeting for election of other officers, in advance of the Annual Session of this Association, each county society shall elect delegates and alternates to represent it in the House of Delegates of this Association, and the secretary of the society shall send a list of such delegates and alternates to the Executive Secretary of this Association annually on or before June first.

Sec. 11—The secretary of each component society shall keep a roster of all its members and of the non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this state, and such other information as may be deemed necessary. In keeping such roster the secretary shall note any changes in the personnel of the profession by death, or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

Sec. 12—The fiscal year of the Association shall be from January 1, to December 31, and all assessments shall be for the fiscal year and *payable in advance.* The secretary of each component society shall forward the assessment for his society, together with the roster of officers and members and list of non-affiliated physicians of the county, to the Executive Secretary of this Association, on or before January 1 of each year, and he shall promptly report thereafter the names of any new members elected to membership in his society, and promptly forward to the Executive Secretary of this Association the assessment for such new members. The assessment shall be the same for all members and entitle the members to all benefits, including the publications of this Association, from the time of paying the assessment to the close of the fiscal year only.

Sec. 13—Any county society which fails to pay its assessment or make the report required by February 1 of each year shall be held suspended, and none of its members or delegates shall be permitted to receive any of the publications of the Association or participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met.

Sec. 14—Each county society shall be held responsible for the faithfulness in the performance of duty on the part of its secretary in making reports and remitting dues or assessments to the Association.

Sec. 15—Each component society shall have its own Constitution and By-Laws, not in conflict with the Constitution and By-Laws either of this Association or of the American Medical Association, a copy of which shall be filed with the Executive Secretary of this Association; and furthermore, the Executive Secretary shall be notified at once of any changes or amendments that may be made from time to time.

CHAPTER XI—MISCELLANEOUS

Section 1—The deliberations of this Association shall be governed by parliamentary usage as contained in Robert's Rules of Order, when not in conflict with this Constitution and By-Laws.

Sec. 2—The Principles of Medical Ethics of the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

CHAPTER XII—MEDICAL DEFENSE

Section 1—Seventy-five cents out of the annual dues of each member of the Association shall be set aside as a special fund for medical defense.

Sec. 2—The administration of medical defense of this Association shall be entrusted to the Executive Committee, which shall constitute the Committee on Defense of the Association.

Sec. 3—This committee shall have full authority governing all matters pertaining to the Medical Defense features of this Association; with power to employ counsel, summon and employ expert witnesses and incur such other expenses as in the judgment of the committee may be necessary in the defense of members against whom suits may be brought; provided, always, that the total expenditure in any single suit shall not exceed 25 per cent of the fund available at the time suit is filed; and provided further that this Association shall not be liable for attorney's fees in such suits unless this committee shall have first agreed in each case with the physician sued and the attorneys representing him in regard to the terms of such employment, including the fees to be paid.

Sec. 4—The Treasurer of the Indiana State Medical Association shall be custodian of the Defense Fund, separately kept, and shall give such additional bond as may be demanded by the Medical Defense Committee. He shall pay out money from this fund only on the signed order of the Chairman of the Executive Committee and countersigned by the President and the Chairman of the Council.

Sec. 5—The Medical Defense Committee shall make an annual report to the House of Delegates of the cases in which it has been of service to members and furnish an account of the money received and expended, such report to be published in THE JOURNAL of the Indiana State Medical Association at the time and in the manner that reports of other committees of the Association are published. The financial report of the committee shall be submitted to and approved by the Council.

Sec. 6—This Association shall not be liable for any damage awarded, but shall be liable only for such expenses for the legal defense of its members as may be incurred in accordance with the terms of these By-Laws.

Sec. 7—The Association shall not undertake the defense of a member in a suit that may be brought to secure indemnity for services rendered prior to January 1, 1912, nor in any case in which the member who applies for medical defense by the Association has failed to pay his annual dues for the year in which services were rendered which are the basis of the suit; and medical defense by the Association shall not be available in any suit based on services rendered during any period of delinquency in the payment of dues. (Dues are payable on January 1, and become delinquent on February 1 of each year.) The membership card of this Association, duly signed and dated by the Executive Secretary, shall be considered the only *bona fide* evidence of payment of dues or membership in this Association.

The Indiana State Medical Association shall in no case provide medical defense against any action for alleged malpractice against any physician unless such physician was a member of this Association in good standing at the time the services which are the basis of the suit were rendered.

Sec. 8—A member desiring to avail himself of the services of the Committee on Medical Defense in connection with litigation brought or threatened must send to the Executive Secretary of the Association for an application blank. After completing the data concerning the case he shall submit to a local committee of his county medical society—to be composed of the President, Secretary and one other member in good standing who may be nominated by the defendant—a full statement of the question at issue, including the diagnosis and treatment of the case and the names of physicians, nurses and other persons having knowledge of the same, who may be summoned as witnesses.

Sec. 9—The committee of the county medical society shall immediately, after an investigation of all the circumstances and facts, transmit its report, with recommendations, to the Committee on Medical Defense of this Association.

Sec. 10—Accompanying such report from the county society, if favoring medical defense by the Association, there also must be furnished the written authority of the defendant granting to the Medical Defense Committee of this Association full power to act in his behaif, and an agreement that his case shall not be compromised or settled without the consent of a majority of the Committee on Medical Defense.

Sec. 11—In the event that the county committee shall fail to recommend the case as one worthy of the recognition of this Association, a direct appeal may be made to the Committee on Medical Defense of this Association, whose decision shall be final.

Sec. 12—Suits brought against the estate of a deceased member shall be defended as if that member were alive; provided that such member was in good standing in the Association at the time of his death and that services for which indemnity is asked were rendered while the deceased was a member in good standing.

Sec. 13—Each member of the Committee on Medical Defense of this Association shall be entitled to an honorarium of $10 per diem for services actually rendered while at home, and $30 per diem with traveling expenses, if required to go out of town in the investigation of any case or in attendance at court, and these same fees shall be allowed to expert witnesses under similar circumstances.

Sec. 14—Medical defense shall not be available to members living outside of the State of Indiana at the time services were rendered for which indemnity is claimed.

Sec. 15—The Committee on Medical Defense shall have power to adopt such other rules, not in conflict with the foregoing, as in their judgment may seem necessary.

Sec. 16—Medical defense as provided for by this Association shall be available to members under the terms stated in these By-Laws only in the defense of civil action for alleged malpractice, and shall not be available if such alleged malpractice occurred when the member was under the influence of any intoxicant or narcotic while rendering the service in question.

CHAPTER XIII—DIVISION OF FEES

This Association does not countenance or tolerate fee-splitting, division of fees, or commission paying directly or indirectly, and any member found guilty shall be expelled from membership.

CHAPTER XIV—AMENDMENTS

Section 1—These By-Laws may be amended at any Annual Session by a majority vote of all the delegates present at that session, after the amendment has lain on the table for one day.

Sec. 2—Upon the adoption of this Constitution and By-Laws, all previous Constitutions and By-Laws are hereby repealed.

THE JOURNAL
OF THE
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DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

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THE JOURNAL'S PLATFORM

1. **Preservation of American Medicine through voluntary service to the sick.**
2. **Advocating full-time county health officers, locally appointed.**
3. **Restoration and preservation of our natural waters and resources.**
4. **Maintain the present high standard of the Indiana University Medical Center, combining the full medical course in Indianapolis.**
5. **Elimination of diphtheria and smallpox through immunization and vaccination.**
6. **Support of the state-wide campaign against undulant fever.**

Editorials

1948

COMES now another year—and how they do pile up! But the calendar says we must start all over, doing the things that were left undone the year before.

Just what the New Year has in store for us we of course do not know—we have but to wait from day to day to learn that. Some of course will make resolutions, no more of this, plus more of that; some will have learned that New Year's Resolutions are but ephemeral, and so have nothing to do with them.

However, there is much to be done; in Medicine we still have unsolved problems and, most of all, we still have before us the task of better medical care for *all* the people.

So, THE JOURNAL can but wish the best of everything for all our readers during the coming year, trusting that it will be the *banner year* of our lives. Therefore, to all we say—

A HAPPY NEW YEAR!

THE YEAR BOOK—1948 EDITION

HEREWITH we present the second edition of the Indiana Medical Year Book, which proved to be very acceptable by all members last year. You will note many changes in content, several new departments having been added. Also, some of the material used in 1947 is not repeated; for example, some of the state laws pertaining to the practice of the healing art in Indiana. While these laws still are in effect, we did not feel it necessary to repeat them this year. However, we would suggest you keep the 1947 copy, as it contains much information that will "come in handy" for a long time to come.

The compilation of this volume represents a prodigious amount of work; the editorial staff, as well as the "front office," has spent a lot of time in gathering this information. In this connection, THE JOURNAL wishes to recognize the work of our association attorney, Albert Stump, who has compiled many of the items of greatest interest to the profession. His advice on many matters has been in-

valuable and his counsel, so generously given, has been of the greatest help.

The current volume will, we are sure, meet with your approval. The directory of members, both alphabetically and by counties, will be of the greatest help to all who want to know just where Dr. John Doe and Dr. Richard Roe may be located.

This Year Book, as we mentioned last year, long has been one of our personal dreams—we have wished that some day we might be able to present such a compilation—so here it is—the second edition. We hope you will like it!

THOSE RECOMMENDATIONS

IN his address to the French Lick session, Doctor Romberger made several recommendations, with all of which we are in full accord. The outstanding one, in our opinion, had to do with the naming of a Speaker of the House of Delegates.

For a long time we have wished that this might be done. A few years back we presented the matter and for a time thought it would be carried out. But there was some opposition, chiefly led by one who hoped some day to be named as the head of the association and, as he put it, "I want to head up the House of Delegates—I want to have my say about certain things."

Our President, as well as the President-elect, have plenty to do while serving their terms; they are kept plenty busy, what with attending meetings all over the state, as well as addressing various groups who want to hear what the medical profession has to say about things.

Comes the latter part of their term, they have additional duties—there are many things to be done. One item, the matter of the appointment of reference committees, is no small item. A House Speaker, especially after he has served a term or so, will find this not an arduous task. From previous experience he will know just who is the proper man to head up some particular committee and, best of all, will know on whom he can depend to be present at the annual session and who will be willing to devote the necessary time to his committee sessions.

A good parliamentarian can save a lot of time in House sessions; we recall one instance in which several hours of valuable time was wasted in the House session at one meeting. Then, too, a *good* Speaker will manage to have most of the resolutions in his hands long before the meeting, thus enabling him to designate the proper committees to which they should be referred.

We feel strongly about this and will welcome the day when we can arise in the House and address "Mr. Speaker."

Another suggestion made was that we have a Vice-President. Yes, we already have a President-elect, but there are occasions when a Vice-President will come in mighty handy. The A.M.A. found this true recently, and there have been occasions here in Indiana when such an office would have been an asset.

The selection of meeting places at least for two years in advance also meets with our entire approval. The Indiana State Medical Association is a big organization; its meetings are being attended by more and more of the members each year. Asking a local committee to perfect an organization, make all the arrangements in a few months, is too much; if a city knows, say two years in advance, they are to be the hosts, much of the preliminary work can be planned well ahead. The recent French Lick session showed that Indiana is not too well equipped for such meetings as ours and even our Capital City is not too well supplied with modern hotels.

It would be well for our Council and our Executive Committee to begin an early consideration of matters such as these, since it is evident that the problem will become no less acute as time goes on.

SOCIAL HYGIENE DAY, FEBRUARY 4, 1948

THE annual observance of Social Hygiene Day is a matter in which the entire medical profession should be interested. Elimination of venereal disease, the aid in law enforcement and family education constitute the three-fold program of the American Social Hygiene Association.

In the United States 250,000 people acquire syphilis each year, according to the United States Public Health Service. Only 95,000 are reported as found and treated in the primary or secondary stages of the disease—the period when infection is most likely to be transmitted to others and the period in which treatment is most effective to the patient.

According to the same organization, 1,200,000 people are infected with gonorrhea each year. Of this number only 375,000 are reported as treated. The remaining 825,000 people either treat themselves or go untreated, eventually to develop the crippling sequellae of this disease.

In any community the problem of law enforcement is of paramount importance. Only with the co-operation of the mayor and the police department can constructive results be obtained. Public official education is accomplished by this organization. Also, "under cover investigation" of cities and towns where prostitution is suspected is carried on.

Character education, education for family life, and sex education are included in the third part of the association program. When we stop to think that divorce has increased 500 per cent in America since the time of the Civil War—that today actu-

ally 31 out of every 100 marriages end in legal separation, we realize that if the present yearly increase of divorces prevails until 1967, 1 out of every 2 marriages will end in divorce.

If we balance these facts against the enormous social problem of ever increasing juvenile delinquency and the solemn fact that the great majority of offenders come from broken homes, then we see the importance of education as an enlightening and preventive measure.

Hence, any one or all of the objectives of this great voluntary social agency is highly commendable and should have the wholehearted support of any community.

ANOTHER "OLD TIMER"

THE *Indianapolis News*, along last month, commented upon the large list of Indiana physicians who received the "Fifty-Year" award, recently, the writer enlarging on the activities of a doctor we long have known, Charles C. Crampton, of Delphi. As the writer puts it, "That guy's a story in himself."

We have known the Cramptons ever since we were born, for, as a matter of fact, they lived but one short hop-step-and-a-jump from our beloved Wild Cat neighborhood—they lived over on "Deer Crick," as James Whitcomb Riley always expressed it. For a good many years, a generation or so, our folk did not "hold much truck" with the Cramptons—they were Democrats! One of the family for years was editor and publisher of the *Delphi Citizen*, while we adhered to the *Delphi Journal*, long published by Charles B. Landis, of the famed *Landis* family. But we did manage, as a young chap, to see an occasional number of the Democratic publication, even though it was not looked upon with much favor by the family.

From the interview as reported in the *News*, it is apparent that "Charley" Crampton still is a Democrat. It states that when the Republicans recently won the gubernatorial office, he was not disappointed, he was not especially displeased—rather was he a bit elated about it. Says he, "Now I have someone to blame things on—if I hit a rut in the road or run into a snow drift, I just blame it on the Republicans!"

He has delivered more than 1,500 youngsters to the mothers of Carroll County, "one, two or three at a time," as he expressed it. He knows every youngster in the county and can give you, offhand, their basketball record, as he seldom misses a game up in that section of the state. One time, long years ago, he remarked to us that he had delivered every member of a certain basketball squad, including the information that "a lot of them never were paid for!"

We have spoken of Deer Creek, which runs through Delphi, but Doctor Crampton's favorite "hang out" always has been the Tippecanoe. For many years he and a few of his cronies have had a little cabin along that stream, near Delphi, the name of the cabin not being presently available, but meaning a "small outhouse of purple hue." Here that good doctor and his cronies are wont to gather during the vacation season.

This is but natural, for Doctor Crampton, long before he ever dreamed of being a local doctor, was a protégé of Doctor Smith, then located in Delphi. This man was one of unusual attainments and held a high reputation as a physician during our boyhood days. He had taken on a little Puerto Rican boy as caretaker of his horses and as his driver on long trips. On one of these trips both the doctor and the boy were killed in a railroad crossing accident.

This Doctor Smith was a personal friend of Riley, who spent many of his summers at the Smith camp, up along Deer Creek, and it was here that the poem, "On the Banks of Deer Crick," was written. Doctor Crampton spent many of his boyhood days at this camp and, of course, became intimately acquainted with Riley. He once remarked to us that he wished he had written down the hundreds of limericks that "Jim" Riley spontaneously composed while at the Smith camp.

It is also to be remarked that after the present-day "Club" holds a dinner session at the cabin—a Dutch Treat by the way—when the hour of ten arrives everyone goes home. (Just as well, probably, for at that hour all "old cocks" should be headed for home.)

One incident in the early life of Doctor Crampton probably will always stand out, the lynching of Amer Green, who was taken from the county jail and hanged a few miles southeast of town. Although Doctor Crampton never has told us that he saw the party, practically every kid in town knew what was going on. In later years Doctor Crampton sent us a picture of Green, hanging to a walnut limb, just as we remembered it, since, with my parents, I had gone over there the next morning.

We might reminisce for many more columns on the activities of this good, old-time, country doctor, just as we might regarding dozens of others about the state. Every section of the Hoosier State has its counterpart of Doctor Crampton, and it long has been our regret that we have not known them all, and that we have not been able to write a story about them. It is of such men that the *real practice* of medicine is made—men who have come up the hard way—and have arrived.

THE NURSING SITUATION, AS OF TODAY

FEW problems relating to Public Health are presently receiving as much attention as the nursing problem, and it is just that—a problem. We recently have received numerous communications on this subject, these coming from diverse agencies, each asking that our medical magazines give more and more publicity to the matter. We are urged to ask that our readers interest themselves more deeply in the matter and that they personally make appeals to our young women about to graduate from our high schools, asking that they seriously consider nursing as a profession.

In *Hygeia*, for December, Morris Fishbein presents an editorial that epitomizes the whole situation, first making clear the crying need for additional thousands of nurses, then suggesting various ways and means through which this end may be reached.

He makes the bold statement that, right now, there is a shortage of nurses amounting to the staggering figure of 42,000 and that when new hospitals are completed, including those of the Veterans' Administration, this figure will be markedly increased. Six hundred thousand more patients entered the hospitals of our country in 1946 than in 1940, all of whom needed nursing attention to some degree, and there is every reason to believe that this increase will multiply in the next few years.

People have become "hospital conscious," they have come to understand that it is a place to get well and no longer a final haven when death approaches. They do not all need a special nurse and but few of them demand a shift of three nurses, but they do want and expect nursing care—that is what hospitals are for, primarily.

We sometimes wonder just how many professional nurses are *really needed* in the offices of physicians; we dare say that if such a survey were to be made it would be found that several hundred of these might be released for other duties.

Again, we have wondered just what could be accomplished by enlarging the public health program in our high schools; perhaps a few hours of lectures during the senior year might produce results. These lectures could be given by medical men in the community, nurses from the hospitals, as well as nurses in the school medical department, itself. We do not believe in trying to glorify the profession, we do not mean that our young women should be told that they are to become Florence Nightingales; rather do we favor the presentation of the fact that nursing is a useful and gainful occupation. It also might be stressed that the old days of twelve hour service, seven days per week, is out; most nurses now work eight hours per day, five days per week.

It's a big task we have before us, one not to be solved by any single group, rather must we all pitch in and solve the problem; it can be solved—it must be solved!

PLANNED PARENTHOOD

THE editorial on this subject is based on the observations of Dr. C. O. McCormick, of Indianapolis. He has spent several years in the study of the problem and seems, finally, to have come out with what he believes the proper solution.

Of course, the subject remains a controversial one and no doubt will elicit some criticism from some of our readers. However, many health organizations have had this subject under consideration for a long time and our official Welfare Departments likewise have had to do with the study. THE JOURNAL "takes no sides" in the matter, merely presenting the observations of a man who should be recognized as somewhat of an authority on the subject.

Editorial Notes

The *Indianapolis News* recently called attention to the fact that in our "nursing campaign," too much attention should not be given to the financial rewards of the profession; rather does the *News* feel that the saving of lives as the result of more and adequate nursing should be the big goal. After all, this is the *big* thing; not how much money we may be able to make from a life vocation, but how much we can do for the betterment of mankind!

The American Red Cross is undertaking a huge project, that of providing whole blood and its derivatives to the entire nation, this without charge. The program has the endorsement of the American Medical Association, as well as other health agencies throughout the nation. It is planned to have especially trained writers to furnish material to the medical journals of the country, explaining the plan in full detail and setting out just how this service may be available to every physician in the nation.

It begins to look like the old "family doctor," now being termed the General Practitioner, is at long last coming into his own. For some time past there was a trend toward "specialism," a group that seemed to want to be classed a little higher than the "garden variety" of doctors, but the latter now seem to have come into their own. They even have their own "Board," which will issue to those deserving same a special certificate, just like the "Diplomates" of the high-brow organizations. Well, why not? After all, we are licensed by the same organizations, we are all trained in the same medical schools, we all are presumed to have equal qualifications. The "man on the street" will vote heavily in favor of the general practitioner and we are inclined to vote the same ticket!

We note a little comment in a recent number of the Tippecanoe County Medical Society Bulletin, signed by Doctor Romberger, retiring President of the Indiana State Medical Association, in which he offers some wholesome advice to members of that group. He concludes with the admonition, "just call me Rommy," when they meet him down street or in the hospital. Friendly, that, but nothing new to us. Heck, since we first knew the chap he has been just "Rommy" to us, probably because Davey Crockett, when first presenting this likable chap to the state association, called him thusly.

For some time past we have been wanting to tell our members just how much it costs to print a medical magazine such as ours—as a matter of fact, *since 1940 the cost of it has increased a bit over 300 per cent!* But due to lack of space in our Year Book we felt that this editorial might well be delayed until the February number. There are many reasons for this increase—the granting of a higher wage to the printers, the marked increase in the cost of paper stock, as well as a half-dozen other items, all of which total up to a huge sum. No, we are not complaining about it; just explaining what becomes of your magazine dollar. We have found nothing that has not increased in price —ever try to buy a pound of pork chops for twenty cents, like we used to do in the Good Old Days? But we will tell you all about it, next month.

For a long time we have advocated the transfer of the first year medical course from Bloomington to Indianapolis. We are pleased to note in a recent newspaper interview that our new Dean of Medicine, Dr. John D. Van Nuys, has come out highly in favor of such a movement. He brings out the fact that ours is one of but four medical schools that do not have all the four years on the one campus.

As we so often have said, the first year is highly important for many reasons, chief of which is that the freshman student is at once surrounded by a "medical atmosphere," and he comes into contact with men in actual practice. Of course we know that such a change means an outlay of considerable money, it would mean the erection of a new building at the Indianapolis Medical Center; even so, we still are of the opinion that the move would be a most wise one and that in due time we may have the full four year course on the one campus.

The Second Annual Michigan Postgraduate Clinical Institute will be held at the Book-Cadillac Hotel, Detroit, Wednesday - Thursday - Friday, March 10-11-12, 1948. Forty-nine outstanding clinicians and lecturers will present a concentrated three-day postgraduate course covering the newest developments in medicine, surgery, obstetrics, pediatrics, dermatology, ophth-otolaryngology and general practice.

Two evening sessions will be held, the Wednesday night presentation being a "question box" and the Thursday evening program being a panel discussion on "First Aid to the Acutely Injured Patient."

All members of the American Medical Association and of the Canadian Medical Association are cordially invited to attend the Michigan Postgraduate Clinical Institute. No registration fee.

A new edition of the Directory of the American Medical Association will be published early in 1948; material for same now is being collected. The last number was issued in 1942 and, during the war years there was no attempt made to issue a new number, though this volume normally was printed every two years. This is the most comprehensive, the most reliable book of the kind ever printed; it contains not only the official list of physicians of the United States, including its possessions, but of Canada and other nearby nations. It also contains all the laws pertaining to the practice of the healing art in these countries, as well as a complete list of all medical organizations therein.

Also, there is a complete list of all the hospitals of these nations, along with other material of much interest to medical men, hospital authorities, et cetera.

In December cards were mailed out to every physician in these countries, asking them to check the personal information now at the A.M.A. office. As usual, some of these cards were not received, some were overlooked. If you have not received one it is very important that you at once communicate with the Directory Department, American Medical Association, 535 North Dearborn Street, Chicago 10, asking for such a card. And, if for any reason you have neglected to mail your card, do so *today.* This is one of the most important duties of every member of the medical profession. This volume goes, literally, all over the world; it is a real Who's Who in American Medicine.

President's Page

WE BEGIN A NEW YEAR

When this JOURNAL reaches you it will be 1948 and "Rommie" will have turned over the responsibilities of the presidency of this association to yours truly. As I assume this role, I am impressed by the potentialities of our organization. On December 1, 1947, the Indiana State Medical Association attained a membership of 3,604, which represents an accumulation of professional skill and scientific attainment as great as any comparable group anywhere. To enumerate the list of members of our association who have achieved high distinction would be a considerable task. To attempt to evaluate the contributions of our individual members to the citizens of this state would indeed be a hugh undertaking. I assure you that I consider it a great honor to serve as president of such an organization. To follow in the footsteps of Floyd Romberger, Jesse Ferrell, Nes Forster, Jake Oliphant, Carl McCaskey, and many other able presidents, is a sobering responsibility, for this association has become accustomed to capable performance by its presidents.

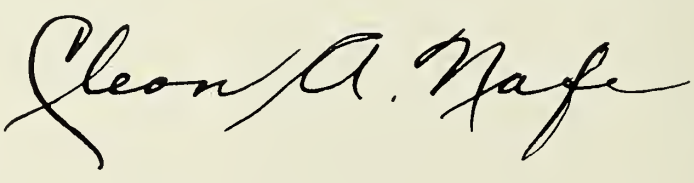
Many problems confront our medical society. Most of the old ones are still with us and new ones continually are arising. As an organization we can do much to solve them, but a president alone can do very little. He can push a little here and guide a little there. Even if he tried, he couldn't do much harm to the organization, and that is probably a good thing, too. About all that he can do is to use his influence for good. With that philosophy, I assume the duties of the office of president for the year 1948, desiring only to fulfill my responsibilities on the team as composed of all the officers and members. Fortunately, our association has a well co-ordinated and efficient headquarters staff, a capable council, and many able committees to direct its functions. As a result, I look forward to a pleasant year as president.

One of the first duties of the president is to appoint a considerable number of committees. This is a difficult task, because it is not always possible to determine who is best suited to serve on a committee, or who will or can devote an adequate amount of his time to these responsibilities. I have sought the advice of the councilors and others in an effort to name suitable men to these committees, but, in the final analysis, I had to make the decision concerning these appointments, for it was my responsibility. These committees are listed elsewhere in this JOURNAL. I believe they are good committees and will serve the association well. Committee assignments should mean some responsibility. Every committee that has been appointed should have a part in the activities of our association this year. I hope that certain specific tasks can be referred to each committee. Even if that is not done, I hope that each committee chairman will make it his responsibility to survey the purpose and possibilities of his committee, and give proper consideration to the problems that fall within that sphere.

To those members who have not received committee assignments, I humbly apologize if I have offended anyone. I have given this responsibility considerable thought and have tried to appoint representative committees. I want to urge that every member of this association consider himself just as much a part of the team as those who call the signals, whether he is on a committee or not.

It is the first responsibility of the physicians of this state to make available good scientific medical care to all the people, in return for a reasonable though adequate compensation. In this program all can participate. It is also our job to give sound and constructive advice relative to individual and community health problems. All can work at this task. We hear much of better public relations by the medical profession. Probably the most important responsibility of every physician now is to try at all times to create good will for the medical profession by making a friend of every patient he sees, by giving to that patient the best medical care that he is able to furnish. The physicians in Indiana probably see 70,000 or more patients every day. Doesn't this impress each of you with the fine opportunity to do a good public relations job?

A happy and useful 1948 is my sincere wish to each and every member of this association.



TRENDS IN MEDICINE*

Roscoe Lloyd Sensenich, M.D.†

SOUTH BEND

THE public has never been so interested in matters of health and the control and eradication of disease as it is today. Public contributions to programs against infantile paralysis, tuberculosis, heart disease, cancer, and other diseases have attained all-time high levels. The tremendous benefits resulting from new discoveries in medicine such as the sulfas, penicillin, and streptomycin have stimulated interest in medical progress. The press daily quotes research men promising possible cures for the most serious diseases, as a product of atomic research.

The programs promoted by the public to attain better levels of health, or to provide education in health matters, or in the support of research have been, in the main, medically guided and sound in planning. Broadly illustrative of this point is the recent meeting of State Departments of Education, State Departments of Health, State and National Education Associations, and State Medical Associations, under the sponsorship of the American Medical Association. The purposes of this meeting were: (1) To confer on matters of health education, patterns of school health programs and school health studies; (2) To define the role of the physician in relation to the health aspects of school physical education and athletics; and (3) To suggest practical methods for providing pre-service and in-service programs for school health personnel. There are many other examples of the same type of co-operation between the lay and medical organizations in education and in the implementation of national health programs.

Members of the Congress have been conscious of this public interest. In many instances legislators have conferred with medical groups relative to the methods by which the government might be helpful in the development of sound medical programs. These legislators have frequently expressed their wishes to avoid introducing objectionable governmental domination of the plan or destructive political practices.

At least on one occasion the Congress, on its own initiative, increased an appropriation for cancer research, after making substantial reductions in a departmental budget. Early in 1947 the President vetoed the National Science Foundation Act of 1947, prepared jointly by prominent research men representing research foundations and associations and educational institutions. The reason given for the veto was that the proposed administration was not sufficiently under government control. In October of 1946 the President appointed The President's Scientific Research Board, under the chairmanship of John R. Steelman, Assistant to the President, and J. Donald Kingsley, Executive Secretary. The report of the Board, "*Science and Public Policy*," was divided into five volumes. Volume I, "*Program for the Nation*," reported that only a very small part of our total research and development of resources of health and medicine is devoted to the expansion of medical research. It recommended, when and if the National Research Foundation is created, that it become a part of the proposed Department of Health, Education and Security. Volume II, "*Federal Research Program*," Volume III, "*Administration for Research*," and Volume IV, "*Manpower and Research*," all discussed matters that would directly or indirectly involve basic medical research. Volume V, "*The Nation's Medical Research*," is devoted entirely to a discussion of problems and proposals for a Federal program. In its final recommendations it proposes the expenditure of $300,000,000 annually for medical research. This is nearly three times the total of present appropriations. It is stated that the Federal Government must take the lead in stimulating fundamental research. Under these proposals the Government would obviously control the administration. Although it provides for a committee of government and non-government medical scientists to concern itself with large scale and long range planning for a national medical research policy, this committee would be only advisory. This report particularly recommends an increase in research in cancer, venereal diseases, and tuberculosis. It also recommends an increase in the study of the diseases of the heart and arteries, and other diseases associated with middle and old age; also, acute respiratory diseases, mental and dental diseases, which, it states, are now receiving insufficient attention.

Others in governmental positions have seized upon the public interest in health apparently as a means of promoting individual political ambitions or with the obvious purpose of establishing large over-all governmental political controls. It is interesting to note that 132 bills and resolutions pertaining to health and medical practice were introduced in the Eightieth Congress. Of the bills upon which hearings were held, 19 Senate and 21 House Bills were reported to their respective floors. Of these, only three Senate Bills, five House Bills, and one Joint Resolution passed both houses. These became law, with the exception of The National Science Foundation Act of 1947, which was vetoed by the President. The President has in several public presentations advocated national health legislation, and other government officers have appeared in

*Presented at the Annual Banquet of the Indiana State Medical Association at the annual meeting in French Lick, October 30, 1947.

† President-elect of the American Medical Association.

favor of the latest version of the Wagner-Murray-Dingell Bill.

The Bills enacted into law concern the incorporation of the American Red Cross, the personnel of the Army and Navy, Public Health Service, the Navy Nurses' Corps, the Army and Navy Medical Service, the Federal Food and Drug Act concerning streptomycin, Selective Service, Labor, Federal Security appropriations and re-organization of the Executive Department of the Government. None of the Bills enacted into law would directly project the government into the distribution of medical care.

The medical profession is not alone in its opposition to government invasion into the rights of the individual in his relation to his physician. Many strong organizations of laymen are coming out to the public in opposition to socialized medicine. One example is that of the National Federation of Small Business, Inc., which is coming out in a national radio broadcast attacking socialized plans. The American Medical Association wisely is assuming leadership in health matters and the presentation of the National Health Program was one of its wisest acts. Those seeking political control of funds, personnel, and private citizens through the agency of government health service find it difficult to sell such proposals—especially against the more sensible, non-political provisions of the American Medical Association program. Communism and socialism find that political promises are not convincing as against the fact that in America under present methods the public record of the best health and the longest average of life ever attained anywhere in the world is a more potent argument.

Laws now provide means for the extension of hospitals and other facilities in areas in which need is found. Legislation now proposed by the medical profession and supported by the informed laymen would make medical care available to everyone and provide for governmental assistance wherever there is need. The medical care provided would be the best medical care, subject to the same standards and incentives to progress that have advanced medical care to the present highest effectiveness, and not the inferior service furnished by politically protected agencies.

Medicine is the oldest of the professions and its beginnings go back to the earliest days. Medical men attended man since his first mental recognition that his injuries could be healed or his illnesses relieved by someone experienced in that art. Man owes more of his present advanced status to medicine than to any other group. Without freedom from attenuating disease, and without sufficient days of life, education, culture, and progress would have been impossible. Throughout the wars for individual freedom, the conflicts of ideologies and the struggles against the stupidities of sovereign governments, medicine has cared for friend and foe alike and continued its scientific progress.

Medicine today is at the highest level of history. Present and projected research give promise of the most stupendous scientific advances. In America scientific advances in prevention and treatment of illness have been generally available to everybody. If in areas they have not been available, it was because of the failures of government agents to extend aid within existing law. The mechanism for broad distribution can be further simplified. Government control and socialization of the methods of distribution of medical care have led to destruction of the quality of that care in every instance in which it has been established. Conditions in Europe at the present time are in the greatest chaos, and this deterioration began before the onset of war. Under government control the political inclinations of the individual physician became a matter of interest to the political agent who controlled the area in which the physician served. With the major portion of medical care controlled by the government, it was necessary that the political attitude of the physician be acceptable to the political administration in order that the physician might be permitted to give medical care to the people whom it was his responsibility to care for. As a consequence, whether he liked it or not, if he wished to give service to his patients, it was necessary that he indicate his allegiance to the political controls in charge of the service of the area. These physicians are now before the courts of their countrymen, being tried to determine whether they were really active participants in the objectionable political activities or if they had been simply forced to announce their allegiance to that ideology in order to be permitted to administer to the sick. What a sad state for a medical profession to be so situated! The best minds are not attracted to that kind of service and the quality of the service accordingly deteriorated.

What of the attitude of the medical profession outside of the United States? The following should be of interest: "In the City of Paris at 3:40 P.M. on the 18th of September, 1947, the World Medical Association came into being." The following were adopted as the objectives of the Association:

1. To promote closer ties among the national medical organizations and among the doctors of the world by personal contact and all other means possible.
2. To maintain the honor and protect the interests of the medical profession.
3. To study and report on the professional problems which confront the medical profession in the different countries.
4. To organize an exchange of information on matters of interest to the medical profession.
5. To establish relations with and to present the view of the medical profession to the World Health Organization, U.N.E.S.C.O., and other appropriate bodies.
6. To assist all peoples of the world to attain the highest possible level of health.
7. To promote world peace.

In the creation of this organization the American Medical Association was one of the leaders, and

the central office and general secretariat of the organization will be located in North America. The organization will have close contact with the World Health Organization of the United Nations in New York. Among the resolutions adopted by the meeting were the requirement that every doctor at the time of receiving his medical degree or diploma be required to subscribe to the following oath:

"My first duty, above all other duties written or unwritten, shall be to care to the best of my ability for any person who is entrusted or entrusts himself to me, to respect his moral liberty, to resist any ill-treatment that may be inflicted on him and, in this connection to refuse my consent to any authority that requires me to ill-treat him.

"Whether my patient be my friend or my enemy, even in time of war or in internal disturbances, and whatever may be his opinions, his race, his party, his social class, his country, or his religion, my treatment and my respect for his human dignity shall be unaffected by such factors."

4. That the World Medical Association endorse judicial action by which members of the medical profession who shared in war crimes are punished.

5. That the World Medical Association request the German Medical Syndicate to make the following public declaration:

a. We, members of the German Medical Syndicate, are aware of the very large numbers of acts of cruelty committed, both by individuals and collectively, since 1933, in mental hospitals and concentration camps, and of the violation of medical ethics. These acts have resulted in the death of some millions of people. A large number of our members have been implicated in these acts, either as instigators or as technical agents or as actual perpetrators;

b. We regret that the organized medical profession in Germany has not made any protest and has been content to ignore these acts, of which it could not have been unaware;

c. We undertake solemnly to condemn these crimes, to expel from our organization the criminals who have committed them, and to remind all our members of the respect due, not only to life, but to human personality and dignity.

To attain the highest possible effectiveness in the activities of World Medical Association recommendations were made that (1) a bulletin be published for the information of the member associations; (2) the preparation of a report on the present position of the medical profession in relation to the state; (3) preparation of a comparative statement on standards and training of the medical profession and conditions of registration, and of a statement of the qualifications of specialists; (4) to study and report on advertisements of cures and medicines in the lay press; (5) to study and report on unqualified and unauthorized medical practice.

Forty-seven nations were represented in this meeting. No such organization has ever existed before this one. The former organization, the "Association Professionelle Internationalee des Medecins," was not comparable to it. New problems require broader interests. The commitment of World Medical Association to a broader interest in the distribution of the best medical care to "all" the people of the world and the promotion of peace are newly stated objectives. At home and throughout the world the nation looks to us, and the world invites the continuation and broadening of the leadership by the American Medical Association and the constituent state associations and component county societies.

What, then, are the trends in medicine? The stimulation of medical research; the study of and determination of the standards of medical education and qualification of those practicing medicine; the highest possible standards of medical care; the broadest possible distribution of the services of the most scientific medicine to all the world; the respect for the dignity of the human personality and the life of the individual; and careful consideration of the position of the medical profession in relation to the state.

These are the trends, but more than that, not only trends, but an organized, advancing and winning program. You as an individual, and your county medical society in its contacts with the public, will determine the future of medicine. The public will support you in opposing regimentation and political medicine.

TIME OF RADIO PROGRAM CHANGED TO 4:15 P.M. SATURDAYS

Time of the radio program of the Indiana State Medical Association, which is heard weekly over WFBM, Indianapolis, has been changed to 4:15 p.m. Saturdays. The title of the present series of transcriptions is "Before the Doctor Comes." The transcriptions are procured from the Bureau of Health Education of the American Medical Association.

Every month or five weeks the fifteen minute period is turned over to the Radio Committee of the Woman's Auxiliary, which presents a playlet on some medical subject. These "live" programs are written and directed by Mrs. Lyman D. Eaton of Franklin, chairman of the auxiliary's Radio Committee, and are very worth-while.

DERMATO-SYPHILOLOGY FOUNDATION MEMORIALIZES DR. ALEMBERT WINTHROP BRAYTON

WITH $50,000 as its goal, the staff of the Department of Dermato-Syphilology at the Indianapolis General Hospital has established the Alembert Winthrop Brayton Foundation for the purpose of doing research in this special field of medicine.

The formal announcement of the foundation was made at a dinner in the Indianapolis Athletic Club on December sixth. At this dinner twelve speakers paid glowing tributes to Dr. Alembert Winthrop Brayton, who pioneered in the field of cutaneous medicine in Indiana's capital city, and in whose honor and memory the foundation has been named. Dr. John Eric Dalton presided, and speakers included Dr. John R. Brayton, Indianapolis dermatologist, who is chairman of the Department of Dermato-Syphilology at General Hospital and son of the distinguished physician.

The foundation will accept gifts to augment the funds provided for the department in the regular hospital budget. The first gift came from Dr. William Thomas Corlett, age 93, professor emeritus of Western Reserve University School of Medicine, Cleveland, who was a contemporary of the late Doctor Brayton.

With the development of General Hospital's $10,000,000 building program, the foundation envisions the time when this particular type of specialist will have a full floor devoted to care of patients, with a staff conference room and other such facilities.

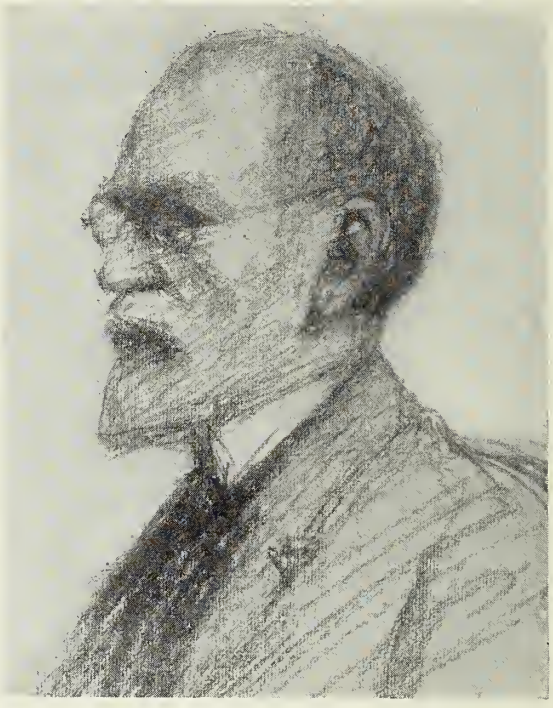
While Indianapolis dermatologists long have wanted such a program here, it did not begin to take definite shape until 1946. Then the American Board of Dermatology and Syphilology approved the hospital for a year's resident training.

About a year later, in April, 1947, approval came for a full three-year's residency, thus making the hospital a full-fledged training center in the treatment of syphilis and diseases of the skin.

With that approval, the foundation began to take shape.

Principal movers in its establishment have been Doctor Dalton, chairman of first-year training in the specialty, and Drs. George W. Bowman, Don E. Kelly, chairman of the clinical dermatology division of the department; Gerald F. Kempf, Indianapolis health officer; John R. Thrasher, chairman of the department's clinical syphilology division; Walter B. Tinsley; and John D. VanNuys, dean of the Indiana University Medical School.

Since approval of the hospital for dermato-syphilology residencies, four doctors have enrolled and currently are in training. They are Drs. Boynton Booth, Robert Jenkins, Theodore Arlook, and Mark Baum.



Alembert Winthrop Brayton

In naming the foundation after the late Dr. Alembert Winthrop Brayton, doctors are commemorating a remarkable physician who practiced the finest traditions of his profession.

At the urging of David Starr Jordan, then a professor of natural history at Butler University, Doctor Brayton moved to Indianapolis in 1877. He was appointed head of the science department of the elementary schools and the Indianapolis High School, now Shortridge.

Dr. Brayton already had developed a searching interest in medicine. After graduating from Butler in 1879, later taking his master's degree from Indiana University, he received his M.D. degree from the Medical College of Indiana, then a part of Butler.

He immediately began his medical practice and soon afterward started teaching medical students, a pursuit in which he was to win many ardent disciples and friends over the years.

Meantime, he and Mrs. Brayton reared nine children, all of whom became college graduates, five of them studying at Butler, and three of the sons becoming physicians.

PLANNED PARENTHOOD—THE ROAD TO NATIONAL HEALTH AND WORLD PEACE*

C. O. McCormick, M.D.

INDIANAPOLIS

ALTHOUGH I shall present a goodly number of data, my presentation will not be as scientific as those usually enjoyed by this society. For that I apologize. I might also add that I do not come before you as a reformer, a propagandist, a radical, or a fanatic. I merely come to convey and emphasize two thoughts: First, to point out the tardiness with which we, the medical profession, have accepted and promoted the most important field of preventive medicine; and, secondly, to stress the basic opportunity, if not responsibility, we of the profession hold in alleviating the problems of civilization even to the extent of the present world-wide crisis characterized by strife, confusion, and insecurity.

To begin with, we agree mutually upon the premise that: *The birth of a baby is a most important event in the life of any community; so important that it should not occur as an accident, nor should it result from ignorance.* Owing to the comprehensiveness of my subject, I would like to add a further line of premise, namely, *"In the beginning it was designed that man live in peace with his fellowmen."*

From the health aspect as a national endeavor, Planned Parenthood is concerned with one of the most neglected fields of public health in the United States. The third largest group of deaths in this country is from causes associated with childbearing, there being 156,000 such deaths annually. Heart disease accounts for 450,000 deaths each year, and cancer for approximately 165,000.

Despite great medical advances, 6,000 women die each year in childbirth; 78,000 babies are born dead, and an additional 72,000 die before they are a month old.

Also, we must consider the fact that there are born each year approximately 40,000 babies with congenital syphilis, and in addition to the terrible tragedies involved, there is incurred from taxes alone an annual cost of over 10,000,000 dollars. Ten per cent of the totally blind and 10 to 25 per cent of the totally deaf inherit their affliction. Then, too, we must not overlook the increasing birth rate of morons, which is said to be doubling each year. By nature, their multiplication is unrestricted. Nor can we discountenance the salient fact that the care of our insane costs the taxpayers a billion dollars annually. Let it be noted that social services preserve the lives of these less desirable stocks, and as a result the proportion of feeble-minded and demented is definitely on the increase. At present, Indiana supports eight overcrowded institutions for its mentally ill. May we interpolate, *"Should it be permissible for anyone who is a burden on his fellow citizens to increase that burden by reproduction?"* Nor is it refreshing to learn that each of our ten public tuberculosis sanitoriums of the state has a waiting list. Last, but not least, the appalling incidence of abortion, estimated at 1,000,000 annually, should attract our keenest consideration. The extent of fetal and infant loss is more impressive when we realize that *one conceived individual in four does not survive pregnancy, labor, and the first month of life.* When we include these fetal deaths resulting from abortion, 60 per cent of which are illegal, the group of deaths associated with childbirth is more than twice that of heart disease, and six times that of cancer.

Planned Parenthood, with its spacing of children, thereby protecting the health of both the mother and infant, and its elimination of unwanted pregnancies, greatly reduces this unnecessary wastage of human life. Needless to say, it finds its greatest field among those of low standards of living, namely, the underprivileged population.

It is of significant historical note that the pioneer of Birth Control in America, Margaret Sanger, was born the sixth of eleven children of poor parentage, in a poverty stricken community. To acquaint ourselves with the need of birth limitation, particularly among the less favored class, we can profitably review hastily some of the life experiences of Margaret Sanger that gave rise to her worthy career.

Early in her childhood she associated poverty, toil, unemployment, drunkenness, cruelty, quarreling, bad debts, and jails with large families. She had observed that the people of wealth lived on the hills away from the river and factories, and that they had but few children, while the poor, with large families, lived in the flats down by the river; also, that the people on the hills owned their own homes, dressed their own children well, kept their houses and yards tidy and clean, that the mothers often took their children shopping with them, and that the best in life seemed to be a matter of course for these children. In contrast, she and the rest of the less favored youngsters did not seem to know where they belonged. They were forbidden to do the things they wished, and

* Read before the Indianapolis Medical Society, October 21, 1947.

seemed to be watched constantly by parents, teachers, ministers, and policemen.

Later on in life, as a graduate nurse and social worker, Mrs. Sanger's field of work took her to the lower east and west sides of Manhattan, into those sections of that great metropolis where approximately 160 babies per acre were born per year—a veritable human spawning ground, if you please—a section where homes well might have been likened to human rabbitaries, except for the condition of disease and disorder they presented. Children were cuffed, kicked, and chased about. Unemployment, crime, and drink prevailed. Here existed a strata of society breeding filth, theft, perjury, and brutality—all elements that contribute materially to juvenile delinquency and other difficult social problems. It was here that Mrs. Sanger observed that ignorance and neglect went hand in hand; mothers had no professional care; children were born in the presence of other children, and many breathed but a few minutes. Abortions, almost as numerous as births, were both medicinally and mechanically crudely performed. The victim was sometimes taken to the hospital, and not infrequently did not return.

Today, these same conditions still prevail to a major degree in many parts and communities throughout our land; and, gentlemen, they are to a surprising extent duplicated within a few stones' throws of where we are gathered. (Some weeks ago, one of the Coleman Hospital interns delivered a mother in her home of her fifteenth baby. As he departed from the case she asked, rather despairingly, "Doctor, when am I going to have my last baby?")

Child spacing seeks to assist in the safe birth of physically and mentally normal children in a number commensurate with the wishes and intellectual and economic capacities of the parents, the children to be so spaced that they will have the advantage of ample breast feeding and the best likelihood for maximum development, and their mothers the opportunity for complete physical and emotional convalescence between births.

Of course, *no mandatory limitation should be placed on the number of children a couple may wish to have;* but, on the other hand, if the social, emotional, intellectual, and economic resources of the community are of such a nature as to make excessive reproduction a mere tragic waste, that fact should at least be pointed out to prospective parents, so that if they wish to avail themselves of methods of limiting their progeny, they may do so easily and without social censure.

To the medical reasons, cardiovascular disease, tuberculosis, diabetes, and the like, usually accepted as contraindicating pregnancy, multiparity can be rightfully added. A woman having her sixth baby assumes twice the chance of losing her life as having her first baby, and three times the risk when having her ninth baby. Even though a mother survives a large series of frequent births, she usually ages prematurely, and often her longevity is so reduced that small children are left unmothered. If these children should be economically handicapped, they find their way into our child welfare and family welfare organizations, charity hospital wards, and juvenile courts.

There are at least 6,000,000 couples in our land who cannot afford private physicians, and have no place to go for reliable information. Only 265 of our 1,300 public health clinics and only 69 of our 4,884 hospitals provide child spacing information.

One of the chief objectives of Planned Parenthood in behalf of public welfare, one that alone well justifies its existence, is combating illegal termination of unwanted pregnancies, a social ill that reflects appallingly upon the health and integrity of American motherhood.

Be it feminist movement or what, an increasing percentage of women, regardless of race, creed, or station, are today demanding emancipation from unlimited and uninterrupted childbearing, and the admonitions of moralists and the medical profession are failing more and more to stem this renouncement.

The policy of Planned Parenthood in this field is based upon the logic that it is more moral and rational wilfully to prevent life than it is wilfully to destroy it.

In 1946, there were 3,440,000 babies born in the United States. Leading obstetrical authorities tell us that one conception in four is terminated as an abortion. On this basis, at least 1,000,000 conceptions were frustrated. Reliable sources inform us that 60 per cent of abortions are intentionally incurred, and that 90 per cent of them are performed upon married women, in a great many instances upon mothers of large families living under an economic strain.

One-sixth of all maternal deaths result from criminal abortion. For every woman who dies, three are made sterile.

It was a death from an induced abortion that precipitated the birth control movement in America. Mrs. Sanger had been called down to Grant Street, on the east side, to attend a twenty-eight-year-old mother of three children, wife of an unemployed husband. The patient was desperately ill of peritonitis following a criminal abortion. The husband would not permit her to be taken to the hospital. After three weeks of diligent care, the patient was sufficiently recovered to dismiss the doctor and Mrs. Sanger. A few months later, Mrs. Sanger again was called hurriedly to the same address. Just before she arrived, the woman died. It was the same old story—she had become pregnant, had used drugs unsuccessfully, had employed a professional abortionist, and the result was death from abortion.

This incident was the igniting spark for Mrs. Sanger. From her desire to help other women there developed in progression a crusade for freedom of speech, scientific discussion upon popula-

tion, the shaking of courts and churches, and finally the successful challenging and overthrowing of certain of our federal laws. Although, in the beginning, Mrs. Sanger suffered many years of personal persecution, all the way from slander to numerous arrests and imprisonment, time has honorably vindicated her.

The most depressing and disconcerting experience in the life of a physician is the witnessing of a death from abortion. The scene is usually quite typical. The husband, a figure of sorrowful dejection, is seen sitting in the corner in remorseful silence, and standing about the foot of the bed are two, three, four, or more loudly sobbing children, all too innocent of the whyfore and quite unaware of the bleakness of the future. Upon departing, one is inwardly stabbed and secretly exclaims, "Oh, Society, how costly your false prejudices!" An intimate history of the case usually reveals that the mother, restrained by a limited family income and inspired with a desire for health and minimal education of her children, reconciled herself, with or without her husband's approval or knowledge, to ending the unplanned pregnancy. All too frequently she submits to the procedure through zealous encouragement from a woman acquaintance of that despicable type who belittles the unsafety and moral obligation involved.

Besides its interest in public health, Planned Parenthood is greatly concerned with certain social aspects — particularly in the markedly increased rate of divorce and juvenile delinquency. In our country today one marriage in three ends in divorce. Ninety-five per cent of marital problems arise from sex, finances, liquor, and "in-laws"—and in the order given. Sex is by far the greatest offender, and it is interesting to observe, when investigating the cause of a divorce, often the question is retorted, "Do you want to know the real cause—or the reason we gave the court?"

Husbands do not leave home because the biscuits are cold, and wives do not forsake their husbands because anniversaries are forgotten. Experts tell us that at least 60 per cent of divorces are fundamentally due to the lack of sound sex knowledge on the part of the husband or wife, or both. Much help in this field can come from sex education among adolescents and from pre-marriage and marital counseling.

Local statistics on divorce are startling. In 1946 there were 9,688 marriage licenses issued in Marion County, and 6,704 divorce suits filed—representing 70 per cent of the marriages contracted. Obviously the chances of an enduring marriage in this community have become a real gamble. The corresponding figure in Reno, the symbol of divorce, was but 44 per cent.

Children from broken homes suffer from the want of affection, security, and protective guidance. Their frustration is heavily reflected as a burden upon society in that they constitute 90 per cent of all juvenile delinquents, whose number, by the way, has increased 67 per cent since 1938. A highly impressive per cent of the inmates of our penal institutions cannot recall their parents. *A child in really serious trouble rarely comes from a good home.* Today a convict enters a state or federal prison every seven and one-half minutes, and the prison population in the six Hoosier penal institutions has increased 15 per cent during the past two years. Crime costs our nation in excess of fourteen billion dollars annually.

Planned Parenthood includes among its aims the study and treatment of infertility. It is not entirely a movement for contraception or family limitation. Intelligent planning of parenthood encourages reproduction when advisable just as much as it seeks to check it when medically contraindicated. Today one couple out of ten is childless and supposedly sterile. Limited research and treatment in this field have indicated already that at least 20 per cent of such couples can have children.

In conjunction with the thought of increased fertility it is well to stress the tremendous value of birth control knowledge when it is widespread instead of a class privilege. Where it has been democratized and has reached all economic and social levels the most responsible and intelligent parents have the largest families. This fact has been repeatedly verified by different scientists in their studies of the differential fertility in Sweden.

One of the broader and most important applications of Planned Parenthood is its usefulness in solving the problem of population control. *Population is very much on the increase.* If our present population trend continues we may expect to have 160,000,000 people in the United States by 1980. Economists and population authorities believe that this country cannot support such an increase if we continue to maintain and improve our present standards of living. Our present population results not from increased birth rate, but rather from the increase of the average span of life. The remarkable decrease in the death rate would have been impossible if the birth rate had continued high.

Our country is highly industrialized, and with industrialization comes surplus wealth, higher standards of living, a near-static birth rate, and a sharply falling death rate, with the result that we have a tremendous increase in the number of people that live. In 1946 our birth rate was 23.3 per 1,000 population, which is less than the rate for 1921 (24.2). In the last fifty years, the average span of life has increased 30 per cent. Today a baby born in the United States can anticipate an average life of 65 years. The corresponding figure for India is 27 years.

In 1800 the birth rate in this country was 55 per 1,000 people (more than twice that of today). Had this rate continued, our population would be more dense than that of either China or India. If India or China could lower their death rates to the United States level, and at the same time keep their present birth rates, either nation could fill five earths within a century.

The two greatest advances of the twentieth century are the control of the death rate and the control of the birth rate. This gives mankind for the first time the ability to determine not only the size but the character of a nation.

Europeans and some Americans speak of the United States as being "underpopulated." If this be true, humanity would benefit if there were a lot more "underpopulated" countries. Although our population is only 6 per cent of the world's total, we are nevertheless overpopulated from the standpoint of per capita economic welfare, but fortunately not so seriously as most nations. Despite the war, inflation, and increased income levels, two-thirds of the children being born come from that third of our families least able to give them minimal health and education to enable them to become productive members of society. Although the year of 1929 was above our normal prosperity, in order to have given all our people a reasonable standard of living at that time, from 70 to 80 per cent more consumers' goods would have had to have been produced. Incidentally, since then our population has increased 15,000,000. In 1941, 33.8 per cent of families of two or more persons had an annual income of less than $1,000.00.

Although not a panacea or cure-all, Planned Parenthood is the most fundamental preventive measure that can help, at relatively low cost, to reduce the basic health and welfare ills—and reduce the taxes and charitable gifts required to take care of them.

Dr. Thomas Parran, Surgeon General of the United States Public Health, as recently as May 29, 1943, made the public statement, "The greatest possible increase in food production will not for decades be enough to meet the minimum adequate diet."

P. H. Whelpton, who was the leading population expert for both the Hoover and Roosevelt administrations, recommended an economically optimum population of 100,000,000. The humane and aesthetic benefits of the smaller population probably would be even greater than the economic values. Human beings might be considered and educated as individuals rather than in masses as is too often the case today.

By primitive urges, some people reason that large families, high birth rates, and rapidly increasing populations conform to natural law. In reality, high birth rates are hangovers from animal and savage times. Here let us be reminded that uncontrolled breeding favors the survival and multiplying of the least gifted.

Another fallacy is that the nation needs more population to supply customers for business. It is true that if the 40,000,000 Americans who now live on low level earnings had enough demand for their services to warrant good wages, business would be brisk.

Then comes the all important question: "Where would we get our manpower in the case of war?" If the birth rate decreases, it might be argued that we will not have an adequate supply of soldiers. The chances are the 100,000,000 people, if healthy and efficient, could turn out as much effective manpower as 150,000,000, a third of whom are ill-fed, ill-clothed, ill-housed, and ill-educated. Furthermore, the nation would have greater health, capital, and natural resources with which to build the most effective weapons of warfare, and there would be less curtailment of civilian goods. *These are all advantages not possessed by the seriously overpopulated countries.*

In a recent bulletin the National Headquarters of the Selective Service System observed, "While the standards maintained by the military forces have been admittedly high, the prevalence of disqualifying defects has become a matter of national concern." The need of improvement in physical and educational quality as a basis for military fitness is well reflected in the same report, in which it states that before Pearl Harbor, when the physical standards were the highest, 52.8 per cent of all men examined were rejected. From July, 1942, through 1943, the monthly rejection ranged from 33.1 to 46.2 per cent.

Before going seriously into the consideration of the need for a large manpower for national defense, let us awaken to the bleak realization that we now live in an atomic era, and that from now on, if war becomes necessary, *quality* in the form of scientists and technical engineers will hold a high priority over *quantity* in the way of colossal armies and navies.

The organization is also deeply interested in research in the physiology and biology of human reproduction. It seeks through a concentrated effort carried on in recognized hospitals and university laboratories to find a better means for treatment of infertility, and a simple, inexpensive contraceptive method that can be used by the most ignorant and depressed people. Recently, a national campaign was conducted to raise $400,000 for the purpose of promoting such research.

A word as to the public acceptance of Planned Parenthood: Recent Gallup and Roper polls indicate overwhelming endorsement of making child-spacing services available through tax supported clinics and hospital services. In the most recent poll, 84.9 per cent of the women of this country favored it. The American Medical Association now recognizes child spacing as an essential part of preventive medicine. The United States Public Health Service considers requests from state and county units to finance child-spacing service. As a result, six states now officially include this in their maternal and child health, tuberculosis, and industrial hygiene services. More than sixty medical groups and thousands of individual physicians endorse and support the movement.

One of the chief obstacles preventing the integration of Planned Parenthood into health and welfare service of the country is the failure of medical schools to provide adequate training to their students. More than half of grade A medical schools, including Indiana University, do not include courses in the control of fertility. *Although our students are taught the contraindications for pregnancy, they are not taught what to do or the methods to prevent conceptions in such cases.* Three out of four physicians in the country have had no training in technics of conception control. While not a great amount of training is necessary, a knowledge of the selection of the appropriate method or device for a given case and skill in application are required. Too often failures of contraceptives lead the practitioner to condemn the practice, when in reality his lack of knowledge and skill is to blame.

May I interject at this point the thought that one is stymied in attempting to explain the medical attitude of discriminaion against regulating woman's function of reproduction? From the cradle, we attempt to regulate her feeding, her elimination, her rest, and her sleep. Later on, as a child, we regulate her exercise, her outdoor living, et cetera —and during her young womanhood, we even attempt regulating her menarche. *But when it comes to regulating her most important function, reproduction, the one for which she was primarly created, we openly falter. And this is true even when the function uncontrolled jeopardizes with certainty her health and the welfare of her family and that of the state.*

Credit for the awakening of the present wide interest in the guidance of human reproduction cannot be claimed by the medical profession. The birth control movement was initiated by an aroused womanhood, aware of the evils of unlimited reproduction and lack of knowledge among individual couples.

Practically all religious organizations, except one, support the birth control movement. The Catholic Church, although agreeing on the principle of family limitation for health, economic, and social reasons, strongly denounces medically approved methods of contraception. Instead, it recommends the rhythm method, which in general is unreliable, and in many instances, impractical.

Interestingly, the government of Puerto Rico, an almost 100 per cent Catholic commonwealth, has, because of the island's dense and diseased population, adopted birth control measures throughout the island. The pressure of population, 544 persons per square mile, recently led an ex-official of the Puerto Rican government to recommend to our Secretary of State, George C. Marshall, the purchase of Dutch Guiana (3½ per square miles) in order to provide living room for the crowded Puerto Ricans.

Today, the Planned Parenthood Federation functions in 38 states, also in Alaska, Puerto Rico, Hawaii, and the Virgin Islands. Six states (North Carolina, South Carolina, Virginia, Florida, Mississippi, and Alabama) include fertility control in their public service. Only two states, Massachusetts and Connecticut, raise legal barriers to education and dissemination of knowledge on birth control under medical auspices. In all, the organization operates more than 700 clinics, many of them offering pre-marriage and marital counseling. It has been said no clinic has ever closed because of the lack of patronage. Where the necessary examinations of patients reveal pathological conditions, such cases are referred elsewhere for the correction of such conditions. This referral also applies to cases of infertility. During the past year, more than 154,000 women visited the clinics for advice and counsel.

The Maternal Health League of Indiana maintains four clinics. One, the state headquarters, is located in Indianapolis, the other three at South Bend, Fort Wayne, and Evansville. The Indianapolis Clinic accepts only indigent and semi-indigent patients, and only upon the referral of physicians, social workers, and ministers. Since its opening, in 1933, over 6,500 patients have sought its services; 602 new patients visited the clinic last year.

While the practicability of applying Planned Parenthood to our nation as a whole influences the minds of our thinking people, their broader vision and thought are more intensely aroused when considering it as a one-world endeavor to curtail and improve population to the extent of producing world peace.

Herewith are some of the terse facts upon world population:[1]

1. The total population of the world is 2,200,000,000. It is increasing at the rate of 20,000,000 annually, and has doubled in the past ninety years. *And there are no new worlds to discover!*

2. At the present rate of increase, despite two world wars and high death rates in Asia and parts of Europe, by the turn of the century, fifty years hence, the world's population will have increased at least 550,000,000. This will be true even with a farseeing world program of population control. *The combined effect of all heretofore active forces against the power of human multiplication is as futile as lighting the darkness of night with fireflies.*

3. If the present trends continue, by 1980 the present population of Russia, 170,000,000, is predicted to reach 240,000,000—that of the United States will increase from 140,000,000 to 160,000,000.

4. Asia, representing one-tenth of the earth's surface, is occupied by one-half of the world's population.

5. China is unable to support its present population, and because of a high death rate has maintained a stationary population.

[1] Burch, G. I. and Pendell, E.: *Population Roads to Peace or War*, Population Reference Bureau, Washington, D.C.; 1945.

6. India and Burma netted 52,000,000 during the last ten years, despite a high death rate from starvation—estimated at 10,000,000 this year in India alone.

7. Twenty to thirty million human beings, a population equal to that of Turkey, Spain, or Mexico, are snuffed out prematurely each year due to undernourishment and disease.

8. For every world inhabitant who has enough, there are three who are in serious want of life's necessities.

9. A thin layer of top soil, often less than a foot deep, is all that stands between life and death of the world's inhabitants. In many parts of the world overcrowded mankind has so abused the precious soil that it no longer will support a large population.

It requires nature from 300 to 1000 years to produce one inch of top soil, and we sometimes lose that much as the result of a single torrential rain. Few people have abused their soil more recklessly than the American people.

10. There are only 4,000,000,000 acres of more or less arable land on earth, and it requires, on the average, 2½ acres of arable land to support one person at a minimum adequate level of living.

How significant these facts when we already have a population of over 2,000,000,000!

In the past, population growth has been controlled by war, famine, pestilence, undernourishment, and unsanitary conditions, *all to the misery of human beings.* Yet, notwithstanding all these factors, plus mass emigration and industrial revolution, Europe and the Orient have remained in a chronic state of overcrowdedness. When overcrowdedness is sufficiently great to threaten prosperity, it becomes a potential cause of war.

Overpopulation produces want; want produces despotism; and despotism produces war. Therefore, overpopulation is basically the cause of war. Where food and jobs are plentiful the problem of government is simple, and strife is not necessary.

It was more than casual coincidence that the three aggressor nations in World War II were highly overpopulated, each headed by a despot, and true to pattern, each forced a higher birth rate. As a result, an inevitable war of expansion was inaugurated. Even prior to the war, Italy had aggressively taken over Ethiopia, and had emigrated four and one-half million of her crowded population to that country. Japan, with its teeming 75,000,000, likewise had preceded the world conflict by aggressive expansion into China and Korea. The Germans incited themselves with the war cry—"*Mehr lebensraum! Mehr lebensraum!*" ("More living room! More living room!")

At this point, a comparative invoice is apropos. The German people appeared to be intelligent, literate, and as industrious as we Americans; yet their economic level of living was only half as high. The Japanese were not the most ignorant, illiterate, and lazy people in the world, but their living level was less than one-third as high as ours. Highly developed technological industrialization of these two nations did not free their people from want, or prevent them from starting a war of expansion. The Chinese produce more food per acre of good land than we, yet their living level is one-tenth as high as ours, and they suffer greatly from famine.

What was true of World War II was equally true of World War I, which was essentially an outgrowth of pressing population. The same holds for many wars down through the ages.

Pope Urban II, in 1095 A.D., in his famous speech concerning the Crusades, said: "This land which you inhabit, shut in on all sides by the sea, and surrounded by mountain peaks, is too narrow for your large population; nor does it abound in wealth; and it furnishes scarcely food enough for its cultivators. Hence, it is that you murder and devour one another. . . . Let therefore hatred depart from among you. . . . Enter upon the road to the Holy Sepulchres; wrest the land from the wicked race, and subject it to yourselves."

In the Book of Lamentations, 4:9, we read, "They that be slain with the sword are better than they that be slain with hunger."

There is an undisputable relation between population and these evils.

The United States and Canada are proud of the fact that war has never threatened between them. There is not a single fortification along their three thousand miles of common border. Not only do they have freedom from war against each other, but they also enjoy freedom of speech, freedom of worship, and relative freedom from want.

The countries of the New World have the four freedoms, while those of the Old World do not, because in the one instance there is a favorable relationship between the number of people and natural resources, while in the latter instance, that relationship is unfavorable.

Democracy (God bless it!) is a rare institution. It is a product of plenty. It is closely associated with freedom from want and, like a flower, it cannot survive where the weeds of overcongestion crowd it.

One most logically asks, "*Why do we, in a rapidly developing machine and industrializing age, need an increasing world population of 20,000,000 annually, particularly when the earth's resources are far from limitless, and already three persons in four live in want; and 20,000,000 to 30,000,000 die prematurely; and there exists an inestimable loss of human embryo life; and two world wars from population pressure have occurred during the present generation?*"

The increasing population is the chief cause of many of our seemingly unsolvable problems of civilization, and if its rate of increase continues, it stands in the way to thwart humanity's progress.

If we are to enjoy freedom from war, despotism, and want, we shall have to adopt, through God-

given intelligence, an over-all rational program of population control. If human reason does not do so, war, famine, pestilence, undernourishment, and unsanitary conditions will do the job, much to our mutual misery.

As human civilization advances and accordingly achieves the reduction of the waste of life, population increases, and an astounding number of additional people are born. Therefore, in controlling population growth, there is only one alternative, the control and decrease of the birth rate. It is the only fundamental solution. If we are to solve problems of poverty and war, *we will have to decrease births faster than we decrease deaths.*

The forces that limit population multiplication fall into two general categories:

1. The *preventive* checks—those that operate before the conception of new life; namely, continence, celibacy, late marriage, sterilization, "sterile period" method, and medical contraceptive control;

2. The *positive* checks—those that operate after new life has been conceived; namely, abortion, infanticide, war, famine, pestilence, undernourishment, poor health, and inadequate medical care.

Herewith a brief consideration of the relative merits of the various preventive measures:

Late marriage involves both continence and celibacy during the period of life when the sex and reproductive urges are usually the strongest, and has proved impractical. Late marriage is further impractical in that it carries extra hazard for both the mother and child at childbirth.

Continence has been advocated since the beginning of history, but it has not worked, because it opposes the strongest of all biological urges, the sex urge. The same can be said of celibacy—it has meant almost nothing in population limitation. Both continence and celibacy are as contrary to the natural law as excessive reproduction. Human beings almost would rather suffer from overpopulation than remain continent and celibate during the earlier period of their lives, when by nature the sex urge and desire for children are all but overwhelming.

The "sterile period," although quite generally employed, is not sufficiently practical, because it is frequently difficult, if not impossible, to determine the sterile period in many women. Besides, many find it difficult to regulate the sex emotion according to the calendar.

Sterilization as a means of population control has a limited applicability. Its chief field to date is the protection of the quality of human-kind. The total number of sterilizations in this country have amounted to less than 45,000.

Abortion and infanticide may be less horrible than malnutrition, famine, disease, and war, but they rate too far down the scale to merit discussion.

Man is no longer an amoeba, and when he once attains true civilization he will have decided between aimless multiplication of organisms and the creation of human beings. His knowledge of birth control will be as widespread as his knowledge of fire.

Contraception in its modern sense is the most meritorious method of all population controls. Some have envisioned it as one of the great discoveries of mankind. Its spread is inevitable, and those who cannot see its advantages would appear to be impervious to the advantages of the better standards of living. It is universally applicable, and since it is of great utility in working out such freedoms as those enumerated in the Atlantic Charter, it could be outstandingly helpful in achieving the final peace goal. No other prophylactic against war is so fundamentally basic. In an overcrowded world war becomes unavoidable, no matter how wise the politicians or terrifying the atomic bomb. It can be assuredly stated that *the control of the birth rate is more important than the control of the atomic bomb.*

Reckless breeding is strangely like social cancer. Surplus human beings eat away all of us. Already one may seriously wonder if we have not done too little and come too late.

In conclusion, to list the many objectives of Planned Parenthood is but to excite our conscientious attention upon their worthiness:

1. To reduce maternal and infant mortality;
2. To prevent criminal abortion;
3. To decrease hereditary disease;
4. To provide better families;
5. To lessen prostitution;
6. To prevent broken homes;
7. To reduce juvenile delinquency;
8. To reduce child labor;
9. To relieve housing congestion;
10. To reduce taxes and charity;
11. To control and improve population, that we may have a better nation and a better world tomorrow.

Finally, in measuring Planned Parenthood to its fullest potentialities for good to the nation and our one-world, should we not in all candor adopt the wisdom so pertinently expressed in the old Chinese proverb?—

"It is better to light a candle
Than to curse the dark."

Medical Panorama by the Associate Editor

GEORGIA proposes a plan for improvement of medical education and medical care in state institutions and as a whole. It presumes the creation by the State Legislature of a State Hospital Authority, similar to the Board of Regents of the University System, to be given control of all state institutions in which patients are treated. Professional care is to be delegated, by law, to the faculties of approved medical schools in the state.

Increase of suitable personnel for treatment of patients; effective, economic business management; added facilities for teaching purposes; augmenting the number of residencies and accommodations for postgraduate medical training; amplifying the amount of clinical material; improvement of medical education, and providing better care for inmates are among the principal reasons advanced for this revolutionary idea. Part of the plan includes a compulsory year of internship for the members of the graduating class of the State Medical School. It is claimed that the adoption of such a plan will place "Georgia in the vanguard of states in the realm of medical education and medical care."

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MICHIGAN reports on a conference on medical education held at the University of Michigan. Speakers indicated 53 per cent of the nation's doctors are now specialists and 80 per cent of medical students contemplate specializing. Eighteen of twenty deans of medical schools, answering a questionnaire regarding subjects for discussion at the next National Conference on Medical Services submitted topics on General Practice and Rural Medical Practice. Detroit has 613 full-time specialists, 762 part-time specialists, and only 637 general practitioners. In another city of 70 doctors, 37 were indicating specialty practice, others limiting practice, and only 12 accepting calls as general practitioners. In another city only 20 per cent were serving as general practitioners. Suggestion is made for a revolving fund of $200,000 for scholarships to aid young physicians who agree to spend five years in general practice in a rural area, in order to combat the trend of over-specialization.

S
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A

MINNESOTA offers a group life insurance policy for active members, in the amount of $5,000, through the Northwestern National Life Insurance Company of Minneapolis. This affords group policy rates and is written on a convertible term basis. Recommended by the Council, it is hoped that it will be attractive to younger members as well as offering established members to add to their coverage.

OKLAHOMA has an effective law requiring identification of the school of healing to which the practitioner belongs; the prefix Dr. must now be supplanted by the suffix M.D., D.D.S., D.O.. or what have you.

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NEW YORK Medicine comments upon an editorial, "Margins of Medicine," appearing in a recent issue of the *Journal of the Medical Society of New Jersey*. This editorial had decried the "naivete, inertia or indifference" which had "allowed much of the periphery of medicine to go by default," and lists optometrists, masseurs, commercial laboratories, counter-prescribing druggists, lay administrators of unsupervised high-colonic irrigation, chiropodists, amateur psychologists, enthusiastic first-aiders, operators of gymnasia, and others as the "marginal disciples which tend to overflow their banks."

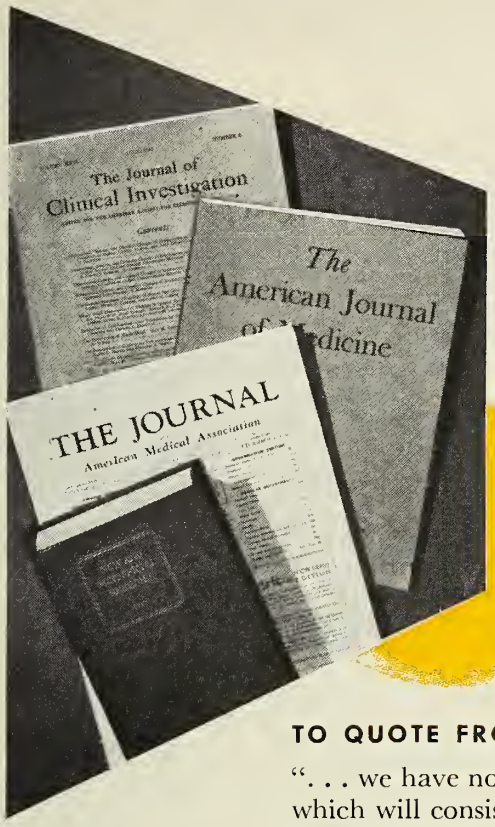
"Ranged alongside these three horsemen—the threat of governmental medicine, the elephantiasis of institutions, and the encroachment of the 'marginal practitioner'—is a fourth horseman, veritably the leader of the troupe. We refer to the factor of indifference, of inertia—that careless unconcern for the future of their own profession which seems to infect all but a tiny minority of medical practitioners. Were it not for this fourth horseman the other three would never have gotten anywhere at all; for it is only as the physician somehow fails to come up to the ideal that he has set for himself—the ideal against which the public still measures him—that the government, the institutions and the marginal practitioners tend to subordinate or supplant him."

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DELAWARE reports that the physicians of Wilmington are being billed in the sum of fifty dollars for an annual medical license due and payable before an expiration date, after which a 25 per cent penalty is imposed. An excellent opportunity to demonstrate the power of a medical organization is offered. Just what would happen if *all* the physicians of Wilmington refused to pay this outrageous tax?

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OHIO dislikes the plans of the Veterans Administration to provide tailor shops, barber shops, billiard rooms, soda fountains, restaurants, and guest rooms for relatives in new VA hospitals. The belief is expressed that this smacks of the vacation resort, will prolong hospitalization, and delay rehabilitation. Unnecessary frills and window dressing should not be encouraged.



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"Gold therapy at present seems to be the only drug which shows promise of checking the activity of rheumatoid arthritis; . . . ."[2]

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CAUTION

Gold Sodium Thiosulfate must be used with extreme caution, especially in the presence of tuberculosis and diseases of the liver and kidneys.

1. *Combined Staff Clinics of the College of Physicians and Surgeons, Columbia University: Am. J. Med.* 1:675 (Dec.) 1946.
2. *Comroe, B. I.: J.A.M.A.* 128:848 (July 21) 1945.
3. *Council of Pharmacy and Chemistry: New and Nonofficial Remedies, 1947, Philadelphia, J. B. Lippincott Company, 1947, p. 477.*
4. *Freyberg, R. H.; Block, W. D., and Levy, S.: J. Clin. Investigation* 20:401 (July) 1941.

SEARLE RESEARCH IN THE SERVICE OF MEDICINE

What's Going On In Indiana by the Executive Secretary

Secretaries' Conference. While the program for the Secretaries' Conference at the Claypool hotel in Indianapolis, Sunday, February 15, will not appear in print until next month, some advance notice should be given physicians so they can make plans to attend. The conference is open to all members of the Indiana State Medical Association. The program will begin at 10 A.M. and conclude at 4 P.M. In former years it ended with a dinner and speaking. The new schedule makes it possible for doctors to get an earlier start home. Congressman Forest A. Harness, of Kokomo, chairman of the Subcommittee on Publicity and Propaganda of the House Committee on Expenditures in the Executive Departments, will be the luncheon speaker. He will reveal some of the startling discoveries made by his committee while investigating the lobbying activities of federal employees as regards government control of private medicine. Other subjects on the program which will be of interest to all physicians are cancer control, home town medical care of veterans, medical public relations, the newly-organized World Medical Association, and the objectives of the A.M.A.'s Council on National Emergency Medical Service. Several prominent out-of-state leaders in medicine have accepted invitations to the conference. Dr. A. M. Mitchell's committee has arranged the program so the audience will have an opportunity to ask questions and participate in the discussion. All in all, it should be a very worth-while day. Come if you can.

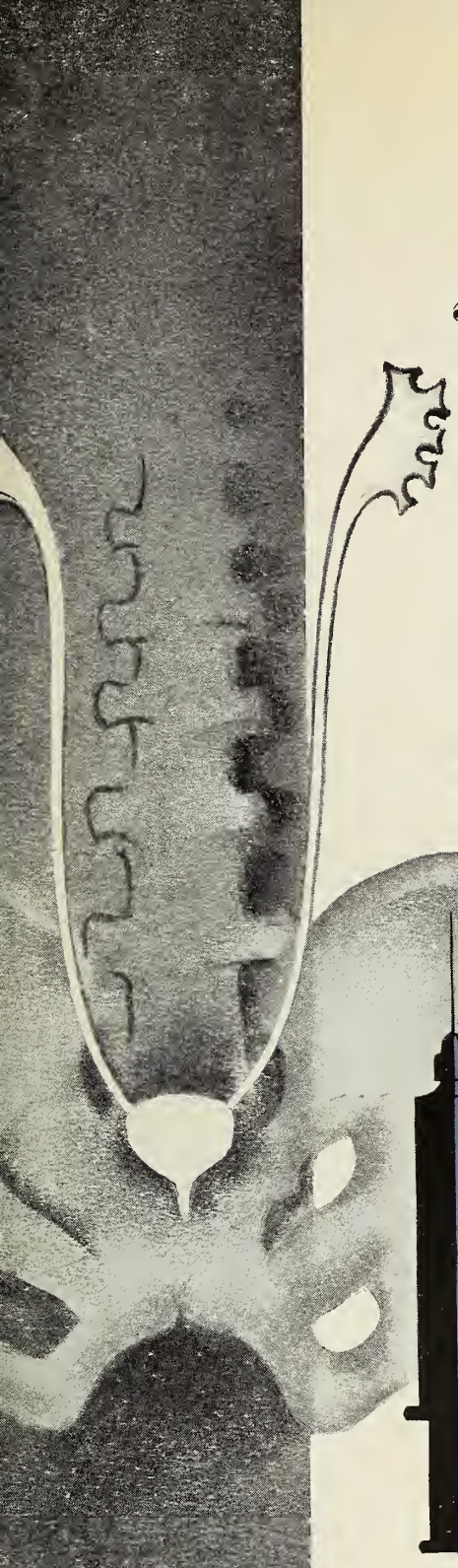
—ISMA—

Lapse of Consciousness Law. Under a 1947 act of the Indiana General Assembly, passed as a highway safety measure, physicians are required, under penalty of a fine, to report the names of all individuals suffering from lapse of consciousness to the State Board of Health, which, in turn, sends the name, age, and address of the individual (but not the doctor's name) to the Division of Safety Responsibility, Bureau of Motor Vehicles, which has no choice but to revoke the patient's driver's license. This law is causing Secretary of State Thomas E. Bath, Jr., no end of headaches. Approximately fifty persons a month are losing their rights to operate automobiles. Secretary of State Bath suggests that physicians bear in mind what happens to patients whose names they report. Since he does not have any discretionary powers in the matter, Mr. Bath believes physicians should understand the severity of the law and not deprive anybody of driving privileges unless they are an actual menace to safety on account of their affliction.

Fifty Year Club Awards. When the names of physicians entitled to membership in the Fifty Year Club were all turned in, the list totaled 204. It is regrettable that some physicians who had practiced for fifty years or more were overlooked by the county medical society secretaries when the original lists were compiled. However, they were sent awards when their eligibility became known. The recipients of the certificates and pins were genuinely grateful. Following are quotes from a few of the letters of acknowledgment: "I am glad to say that I have enjoyed my work and also enjoyed good health in all this time. The sad part is that there won't be many more years ahead and it won't be long until the final kick-off comes and the game is over. Well, it was worth it, anyway!" . . . "Please accept our thanks for the beautiful tribute sent to my husband, Dr. _____. He received the certificate and lovely pin just four days before passing away and felt proud and honored. It cheered him.". . . "The certificate and pin have arrived and I wish to express my gratitude. For years I have been convinced that a ten cent buttonhole bouquet received when one is alive is worth more than a $50 wreath placed on one's casket. Therefore, I can fully appreciate the courtesy of my fellows when such an honor as this is bestowed upon me." . . . "I received the Certificate of Distinction and pin a few days ago. They are very fine. I scarcely withheld shedding a few tears of appreciation. I am 81 years old and can still give intravenouses. Gave one yesterday. My ambition has always been to maintain and uphold the dignity of the profession.". . . "I feel highly honored and accept the awards with sincere thanks for the thoughtfulness of the medical society. Such a friendly token makes us older doctors feel that we have not lived in vain." It could be seen that many of the letters were written with effort by trembling hands; one by a doctor now past his 91st year. Indiana medicine is proud of these men and women, every one of them!

—ISMA—

This and That. The American Medical Association mailed cards asking for information for the 1948 medical directory to all physicians as of record in the middle of November. If you got a card, be sure you filled it out and returned it. If you didn't receive one of the cards, write immediately to the Directory Department, American Medical Association, 535 N. Dearborn St., Chicago 10, Illinois, and ask for one. We do not want any Indiana physician's name to be omitted.



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Deaths

Edward O. Little, M.D., of Danville, died at his home on November seventeenth, at the age of sixty-nine years. Doctor Little was graduated from the State College of Physicians and Surgeons, in Indianapolis, in 1878, and had served in World War I, with the rank of colonel.

William C. Mount, M.D., of Kirklin, died suddenly at his home on November twenty-fourth. He was sixty-eight years of age. Doctor Mount graduated from the University of Illinois College of Medicine, in Chicago, in 1905, and for over forty years had been a practicing physician in the community of Kirklin. He was a member of the Clinton County Medical Society, the Indiana State Medical Association, and the American Medical Association.

Emery F. Small, M.D., of Vincennes, died suddenly at his home on November twenty-first, at the age of seventy-three years. Doctor Small graduated from the Medical College of Indiana, in Indianapolis, in 1904. He was a veteran of World War I having served as a first lieutenant in the army medical corps, and was a member of the Knox County Medical Society, the Indiana State Medical Association, and the American Medical Association.

John R. Wilson, M.D., of Terre Haute, died on October twenty-seventh, at the age of seventy-eight years. Doctor Wilson graduated from the Northwestern University Medical School, in Chicago, in 1892, and for over fifty years had practiced in the community of Prairie Creek, retiring five years ago. Doctor Wilson was a member of the Vigo County Medical Society, the Indiana State Medical Association, and the American Medical Association.

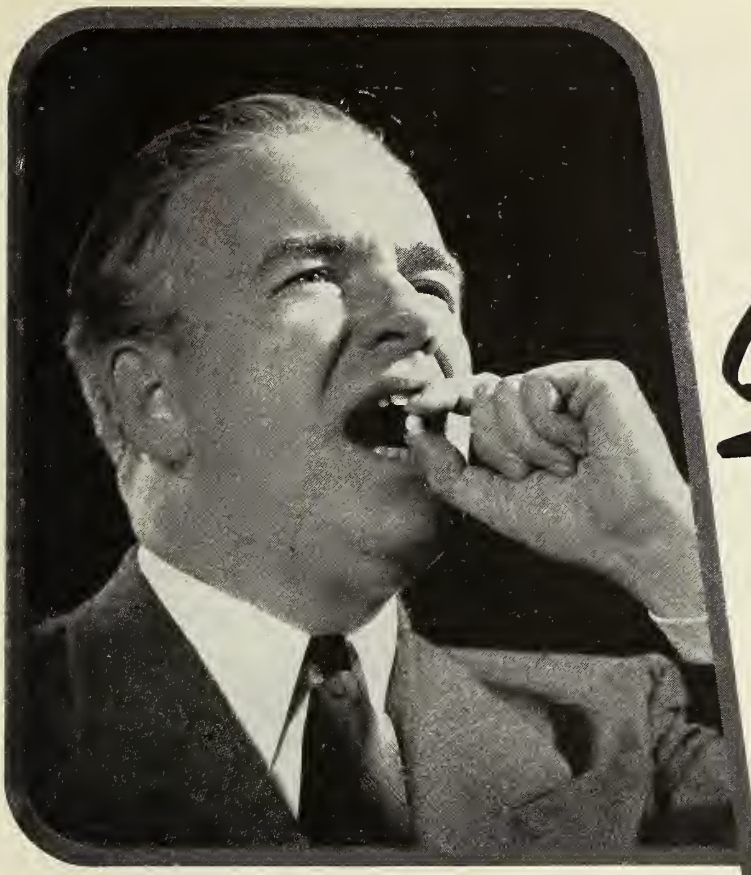
George N. Lake, M.D., of Pleasant Lake, died suddenly at his home on November twenty-fourth. He was seventy-one years of age. Doctor Lake graduated from the Fort Wayne College of Medicine in 1902, and for the past forty-five years had been a practicing physician in the community of Pleasant Lake.

Charles H. Bruner, M.D., of Greenfield, died on November sixteenth, at his home, following a period of ill health of about a year. He was sixty years of age. Dr. Bruner graduated from the Indiana University School of Medicine, in Indianapolis, in 1915. He was a veteran of World War I, having served in the Army Medical Corps, and was a member of the Hancock County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

Albert L. Crane, M.D., of Evansville, died on November seventeenth, in New York City. He was fifty-four years of age. Doctor Crane was graduated from the Long Island College of Medicine, in Brooklyn, in 1928, and since 1940 had been practicing in Evansville, specializing in psychiatry and neurology. Doctor Crane was a member of the Vanderburgh County Medical Society, the Indiana State Medical Association, The American Board of Psychiatry and Neurology, and the American Medical Association.

Charles C. Copeland, M.D., of North Madison, died at his home on November twentieth, at the age of eighty-three years. Doctor Copeland was graduated from the University of Louisville School of Medicine in 1889 and for more than fifty years had been a practicing physician in Madison and North Madison. He was an Honorary member of the Jefferson County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

Ethan A. Ish, M.D., of Waterloo, died suddenly on November nineteenth, at the age of seventy years. Doctor Ish graduated from the Chicago College of Medicine and Surgery in 1909, and for thirty-three years had served the Waterloo community as a practicing physician. He was a veteran of World War I, having served in the medical corps of the army. Doctor Ish was a member of the DeKalb County Medical Society, the Indiana State Medical Association, and the American Medical Association.



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News Notes

Announcement has been made by Dr. Philip W. Rothrock of the opening of an office in Lafayette where he will practice general medicine. Dr. Rothrock is a veteran of World War II, having served for three years as a captain in the Army Medical Corps.

Following the completion of a year of residency at the Indianapolis General Hospital, Dr. Richard Russell has become associated with Dr. G. H. McCaskey, of Winamac, in the practice of general medicine.

Dr. V. R. Lazo, of Wheatland, has gone to Manila, Philippine Islands, where he is planning to open an office with his brother for the practice of general medicine.

Dr. Wallace K. Dyer has opened an office at 908 Holman Building, Evansville, where he will specialize in ear, nose, and throat practice.

Miss Geneva Farley, of Charleston, West Virginia, and Dr. Paul Burns, of Montpelier, were united in marriage in Montpelier, on November thirtieth. Dr. and Mrs. Burns will reside at 543 S. Main Street, Montpelier.

Dr. William T. Douglas, formerly of West Lafayette, and Earl Park, has opened an office in Montpelier, where he will engage in the general practice of medicine.

Dr. Robert E. Chattin, who has recently been discharged from service, has announced the opening of an office in Loogootee, for the general practice of medicine.

At a recent meeting of the American Society of Clinical Pathologists, held in Chicago, Dr. Clyde G. Culbertson, of Indianapolis, was elected vice-president.

Dr. V. Kenneth Stoelting has been selected to head the new Department of Anesthesiology at the Indiana University Medical Center.

Dr. and Mrs. H. J. Norton, of Columbus, will spend the winter in Homosassa Springs, Florida, where Dr. Norton will be resident physician for the Homosassa Springs Hotel. During Dr. Norton's absence, Dr. Griffith Marr is taking over his office and practice.

Dr. Lawerence Shinabery, of Fort Wayne, has been elected treasurer of the Association of American Physicians and Surgeons.

Dr. J. R. VanKirk, formerly of Kentland, has announced the opening of an office in Burlington, where he will engage in the practice of general medicine.

Dr. Maurice A. Turner, who has been associated with the Stork Hospital in Huntingburg, has opened an office for the general practice of medicine in Oakland City.

Having recently completed postgraduate work in ear, nose, and throat diseases, at the University of Pennsylvania, Dr. Tom S. Shields has opened an office in Richmond. His practice will be limited to allergies, and diseases and surgery of the ear, nose, and throat.

Dr. Howard J. Henry, of Knox, has joined the staff of the Stork Hospital, in Huntingburg, as an associate to Dr. H. K. Stork.

Motion Picture on "Problem Child"

A film entitled "Problem Child" has been written and produced by the American Academy of Pediatrics. Prepared primarily for special lay groups, the Academy, however, wishes to have physicians pass on the film before it is shown to the laity. The film deals with some of the common problems of growth and development, and stresses environmental factors, especially parental attitudes which influence mental health. The picture runs for approximately twenty-five minutes, is a 16 mm. sound film, and is free of charge. It may be obtained by writing to the Pet Milk Company, St. Louis, Missouri, attention Research Division. After viewing the film, the American Academy of Pediatrics will appreciate any suggestions or comments.

Doctor Forster Moves to California

Dr. N. K. Forster, president of the Indiana State Medical Association in 1945, associate editor of THE JOURNAL, and alternate delegate to the A.M.A. House of Delegates, has sold his home and disposed of his practice in Hammond and has gone to LaJolla, California, to make his future home. His address in LaJolla is 5648 Dolphin Place.

Doctor Forster's mother, Mrs. Mary C. Forster, nearly 80 years old, died in December. Her home was in California, and one of the reasons he was moving there was on account of her ill health.

For nearly twenty-five years Doctor Forster has practiced medicine in Lake county. He has served as president of his county and district medical societies and was councilor of the Tenth district. He has served on many important committees of the state association.



Modern Similac is a complete, laboratory modification of cow's milk providing fat, protein, carbohydrate, and minerals in breast milk proportions—and in forms chemically and metabolically resembling those food substances as found in breast milk.

Simple Feedings are prepared simply by adding the Similac powder to water in proportions prescribed.

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A powdered, modified milk product especially prepared for infant feeding, made from tuberculin tested cow's milk (casein modified) from which part of the butter fat has been removed and to which has been added lactose, cocoanut oil, cocoa butter, corn oil, and olive oil. Each quart of normal dilution Similac contains approximately 400 U.S.P. units of Vitamin D, and 2500 U.S.P. units of Vitamin A as a result of the addition of fish liver oil concentrate.

SIMILAC *Similar to breast milk*

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The Committee on Medical and Nursing School Scholarships announces receipt of a $600 check from the Indiana Botanic Gardens, Hammond, which will provide a three-year scholarship for some young woman desiring to study nursing. The committee will award the scholarship within the near future. This will make a total of nine young women in Indiana nursing schools who are receiving financial aid through the state association's scholarship committee.

A register of tuberculosis cases will be established in each of the five branch offices of the Indiana State Board of Health for the purpose of maintaining a more adequate tuberculosis control program in Indiana, according to an announcement made recently by Dr. Merle Bundy, director, Division of Tuberculosis Control, Indiana State Board of Health. These registers will assist in establishing and maintaining an up-to-date record of tuberculosis patients and their supervision.

At the regular meeting of the Delaware-Blackford County Medical Society on October 21, 1947, the following resolution was adopted:

"RESOLVED, That the Delaware-Blackford County Medical Society favors the formation of a city-county health department which would unite all health organizations of the community in one organization under the administration of a qualified, full time, public health officer."

Sectional Meetings of American College of Surgeons.

Six sectional meetings of the American College of Surgeons have been scheduled for 1948, for Fellows of the College, the medical profession, and hospital personnel. Each meeting will last two days and will include conferences for hospital personnel, as well as sessions for the medical profession. The program will include a symposium on cancer, and panel discussions on scientific subjects led by internationally known authorities in each field of surgery. The meetings will be held as follows: Toledo, January 20 and 21, Commodore Perry Hotel; Atlanta, January 26 and 27, Ansley Hotel; Oklahoma City, January 30 and 31, Oklahoma Biltmore Hotel; Denver, March 1 and 2, Cosmopolitan Hotel; Minneapolis, March 15 and 16, Hotel Nicollet; Halifax, May 17 and 18, The Nova Scotian.

Announcement has been made by Dr. John H. Flinn of his association with Dr. Herman M. Baker, 402 Hulman Building, in Evansville. Doctor Flinn is a graduate of the University of Chicago and of Northwestern University; he interned at St. Luke's hospital, and served a residency in medicine at St. Paul General Hospital, followed by a fellowship at the Mayo Clinic in internal medicine. He spent three years in the Army as chief of the medical service, and subsequently returned to the Mayo Clinic for additional graduate work. Doctor Flinn will specialize in gastro-enterology.

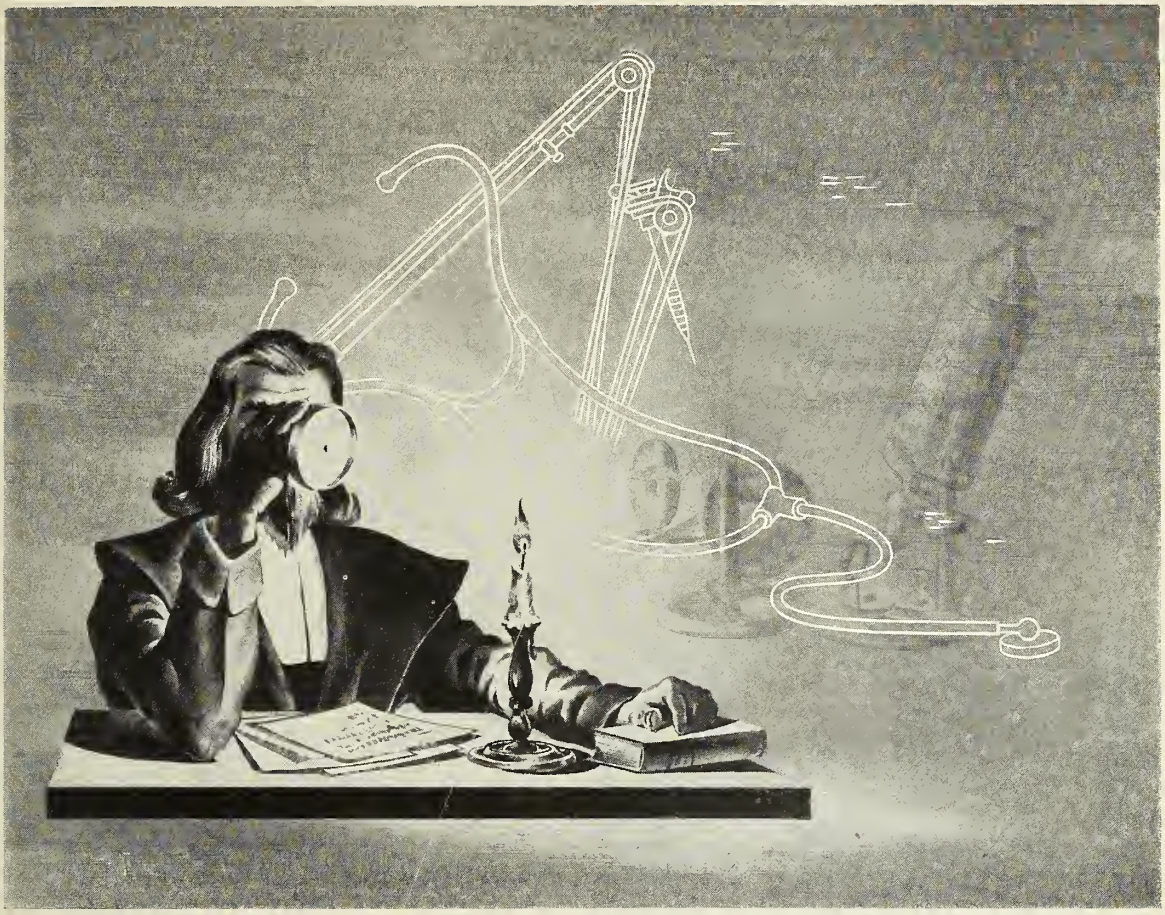
The Panama Canal is in urgent need of a number of Medical Officers for duty in the Canal Zone. These positions are in the professional grades of P-3 and P-4 at entrance salaries of $5,187 per annum and $6,127.50 per annum, respectively. Appointments at the P-4 grade may be made of applicants who have had three or more years' experience subsequent to internship; appointments at the P-3 grade are made of applicants with less than three years of experience. Candidates for these positions must be graduates of approved medical schools and American citizens not over 45 years of age. This age requirement is waived up to the age of 62 years for persons entitled to veterans preference. Appointments will be made on a temporary-indefinite basis, pending the announcement of an unassembled civil service examination by the United States Civil Service Commission. At that time appointees will be given an opportunity to take this unassembled examination with a view to being certified for permanent appointment. For further information contact James C. Hughes, Acting Chief of Office, The Panama Canal, Washington Office, Washington 25, D. C.

Dr. Dallas Fickas, of Evansville, was elected president of the Vanderburgh County Medical Society at the annual business meeting December 9. Others elected were Dr. George W. Willison, vice-president; Dr. Howard C. Slaughter, secretary-treasurer; Dr. William C. Caldwell, board of censors; Dr. Robert W. Viehe, board of directors; Dr. Paul Crimm and Dr. C. C. Herzer, delegates to the Indiana State Medical Association, and Dr. W. L. Daves and Dr. Joseph Lawrence, alternate delegates.

The Society amended its constitution to provide for a president-elect. A special election will be held in February to name the president-elect who will become president in January 1949.

Arthur P. Tiernan, who was employed in September as executive-secretary of the Vanderburgh County Medical Society, has established an office which is located at 312 Third and Main Building, Evansville.

On recommendation of the Vanderburgh County Medical Society, patients admitted to any of Evansville's three major hospitals will be chest x-rayed in search for tuberculosis. The program will begin early in 1948. It was proposed in a resolution adopted by the Medical Society in November, and subsequently adopted by the Evansville Hospital Council. The three hospitals are buying special equipment, and expect to start the new program simultaneously. The plan also includes chest x-rays for all hospital executives and employees. Cost of each x-ray will be $1.50 for the patient. The program is designed to prevent the spread of tuberculosis and to detect it when it might otherwise be overlooked. Hospital administrators in Evansville said their city is the first in the nation where all general hospitals require the x-rays.



The First Microscope...

For Both Medicine and Dentistry, the playful hobby of a Dutch spectacle-maker was of incomparable importance. "Spectacle-maker," *indeed!* What more weird "spectacle" than a tiny flea, lumbering huge, hairy and horrible through the lenses of Hans Janssen, about 1590?

Four men, each born between 1628 and 1637, were quick to grasp vital implications in Janssen's gadget, *independently but simultaneously!* With microscopes of their own make, Malpighi found the capillaries; Swammerdam found the red blood cells; van Leeuwenhoek found spermatozoa; and Hooke, whose microscope was the first to resemble today's, anticipated Schleiden's cell theory by 200 years.

But a doctor's legal liability was growing as fast as his knowledge. Sir Edward Coke, "father of the common law," ruled in 1615 that a doctor could be sued not only by a patient's employer for breach of contract, but also by the employee for malpractice.

★ ★ ★

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ADDITIONAL PHOTOGRAPHS TAKEN AT FRENCH LICK

(Photos Courtesy Russell A. Sage, M.D.)



Left to right: (facing camera) Drs. E. V. Hahn, H. G. Hamer, and Reid L. Keenan, all of Indianapolis.



Left to right: Drs. Minor Miller, R. L. Sensenich, and Thurman B. Rice.

American Board of Obstetrics and Gynecology, Inc.

The next written examination and review of case histories (Part I) for all candidates will be held in various cities of the United States and Canada on Friday, February 6, 1948.

Arrangements will be made so far as is possible for candidates to take the Part I examination (written paper and submission of case records) at places convenient for them. Candidates who successfully complete the Part I examination proceed automatically to the Part II examination to be held May 16-22, 1948, in Washington, D. C. Notice of the exact time and place of the Part I and Part II examinations will be sent all candidates well in advance of the examination date.

For further information and application blanks address Paul Titus, M.D., Secretary, 1015 Highland Building, Pittsburgh, Pennsylvania.

Dr. Robert S. Dinsmore of the Crile Clinic, Cleveland, will speak on some surgical subject before the Tippecanoe County Medical Society at LaFayette Tuesday night, February 10.

Mississippi Valley Medical Society 1948 Essay Contest

The Eighth Annual Essay Contest of the Mississippi Valley Medical Society will be held in 1948. The Society will offer a cash prize of $100, a gold medal, and a certificate of award for the best unpublished essay on any subject of general medical interest (including medical economics and education) and practical value to the general practitioner of medicine. Certificates of merit may also be granted to the physicians whose essays are rated second and third best. Contestants must be members of the American Medical Association who are residents of the United States. The winner will be invited to present his contribution before the Thirteenth Annual Meeting of the Mississippi Valley Medical Society to be held in Springfield, Illinois, September 29, 30, October 1, 1948, the Society reserving the exclusive right to first publish the essay in its official publication—the *Mississippi Valley Medical Journal* (incorporating the *Radiologic Review*). All contributions shall be typewritten in English in manuscript form, submitted in five copies, not to exceed 5,000 words, and must be received not later than May 1, 1948. Further details may be secured from Harold Swanberg, M.D., Secretary, Mississippi Valley Medical Society, 209-224 W. C. U. Building, Quincy, Illinois.

University of Michigan Postgraduate Medicine Courses

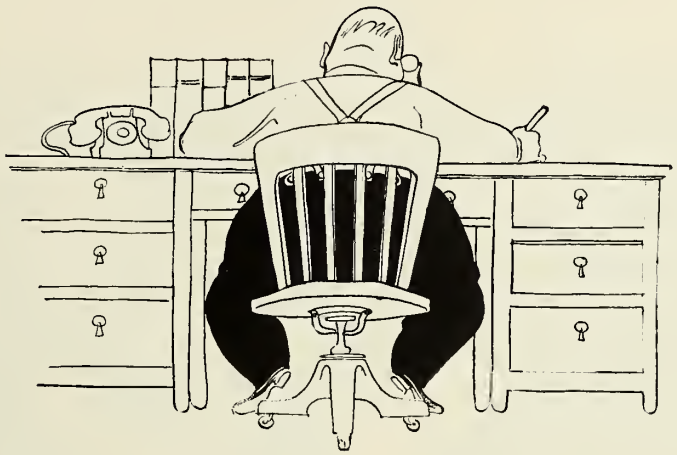
Application of the Basic Sciences to Clinical Medicine.

This course will consist of lectures which will cover the phases of chemistry, physiology, bacteriology, pathology, and pharmacology which are directly applied in the practice of internal medicine as well as clinical medicine. Daily ward rounds in small groups will offer practical demonstrations with patients and emphasize problems in physical diagnosis. Clinical conferences with the pharmacologist, bacteriologist, and pathologist will further aid in the correlation. Fee, $100. January 5 to 31, 1948.

Second Seminar in Urology.

A two-day postgraduate program in Urology and related sciences is being offered by the Postgraduate Medicine Department of the University of Michigan under sponsorship of the Detroit Urological Society. The lectures and clinics have been selected to interest the specialists in both practice and basic knowledge of Urology. Fee, $15. January 28 and 29, 1948.

Requests for further information on either of these courses should be addressed to: Howard H. Cummings, M.D., Department of Postgraduate Medicine, University of Michigan, Ann Arbor, Michigan.



PICTURE OF how B. J. Bender became a nutritive failure....

Bender is but one of the great American army of chair-warmers, shining examples of the need for two-pants suits. Exercise? They lie down until the thought of it passes. Appetite? They seek the bizarre in food to goad their tired taste buds. Result? In too many cases, sub-clinical vitamin deficiency—a condition in which the sedentary worker has a host of companions in nutritional crime: the food faddists, chronic dieters, excessive smokers, alcoholics and many others. Dietary reform is the physician's first thought, of course—vitamin supplementation usually the second. And the vitamin preparation specified very often carries the "ABBOTT" name. There is a wide variety of vitamin preparations available in the complete Abbott line . . . for oral and parenteral use . . . for almost any patient's needs, age or taste. If you are not already familiar with Abbott's dependable vitamin products, they are worth your investigation—and trial. ABBOTT LABORATORIES, NORTH CHICAGO, ILLINOIS

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Society Reports

INDIANA STATE MEDICAL ASSOCIATION

BUREAU OF PUBLICITY

November 18, 1947

Present: H. G. Hamer, M.D., chairman; David L. Smith, M.D., and Ray E. Smith, executive secretary.

The executive secretary was directed to prepare an answer to letter from constitutional secretary of the Colorado State Medical Society asking about policy on radio and newspaper publicity, and submit it to members of the bureau for approval before mailing.

The secretary reported that the Executive Committee had turned down offer of articles entitled, "Medicine in the News," received from a member of the American Medical Association staff.

The question of preparing an exhibit showing the great strides made by medicine throughout the hundred year period of 1849 to 1949 for the lay public, as the Bureau of Publicity's part in the centennial celebration in 1949, was approved tentatively. The secretary was instructed to submit ideas and costs of such an exhibit for future consideration.

The secretary was authorized to prepare program suggestions for the program chairman of the Woman's Auxiliary to the Porter County Medical Society, in answer to request.

The American Medical Association radio transcriptions entitled, "Before the Doctor Comes," was selected to follow the present radio series over WFBM.

The Woman's Auxiliary radio chairman was invited to use the bureau's time for a "live program" on Monday, December 29, 1947.

Book reviews of the booklet, "Blueprint for the Nationalization of Medicine," written by Miss Marjorie Shearon, were agreed upon as good material for county units of the Woman's Auxiliary, and the secretary was instructed to forward the suggestion to the state program chairman of the auxiliary.

COUNCILOR DISTRICT MEETING

SEVENTH DISTRICT

Dr. Horace M. Banks of Indianapolis was named president-elect and Dr. Cyrus J. Clark, also of Indianapolis, was re-elected councilor at a meeting of the Seventh District Medical Society in Martinsville Tuesday, December 9. Dr. Donald E. Wood of Indianapolis was elected secretary-treasurer.

The district society will hold a joint meeting with the Indianapolis Medical Society in Indianapolis next May. The Johnson County Medical Society will be host to the group at Franklin next September.

In the afternoon Dr. Wayne L. Ritter of Indianapolis presented a paper on "Hair Loss Studies," and Dr. R. Arnold Griswold, professor of surgery, University of Louisville School of Medicine, lectured on "Vagotomy for Duodenal Ulcer." The ladies were entertained at tea at the home of Dr. and Mrs. M. C. Pitkin.

The feature of the dinner program was an address by Edward Dowling, Indianapolis candy manufacturer, on his recent 35,000-mile round-the-world tour. He described conditions as he saw them in thirteen foreign countries which he visited. Other speakers included Dr. Cleon A. Nafe of Indianapolis, president of the state medical association; Dr. Harry Murphy of Franklin, who succeeded Dr. Leon Gray of Martinsville as district president; Dr. Carl H. McCaskey of Indianapolis, past president of the state medical association and now chairman of the executive committee; Dr. J. William Wright, immediate past president of the Indianapolis Medical Society; Dr. Clark; Joseph E. Palmer, executive secretary of the Indianapolis society, and Ray E. Smith, state association secretary.

LOCAL SOCIETY REPORTS

100% IN PAYMENT OF DUES

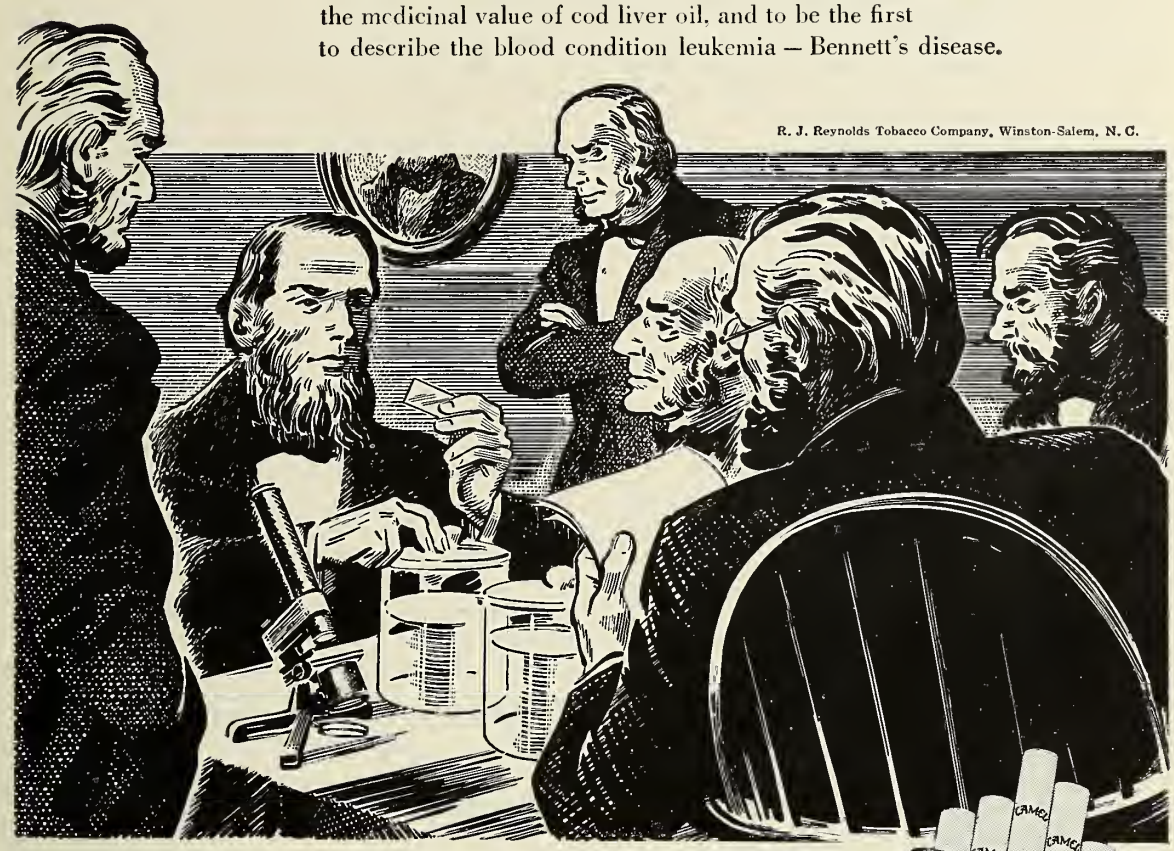
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White County

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than any other cigarette

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Cass County Medical Society members held a dinner meeting on November twenty-first at the Cass County Memorial Hospital, in Logansport. Dr. W. W. Holmes, of Logansport, presented a sound film on "Otitis Media in Pediatrics." Eighteen members attended this meeting.

* * *

DeKalb County Medical Society members met at the Sacred Heart Hospital, in Garrett, on November twelfth. Presentation of an unusual case of gas gangrene was given by Dr. Floyd B. Kantzer, of Garrett, which was followed by a discussion by members of the group of similar cases treated. Fifteen members were in attendance.

* * *

Elkhart County Medical Society members held a dinner meeting at the Hotel Elkhart, in Elkhart, on December second. The guest speakers were Dr. Morris Fishbein, of Chicago, and Dr. R. L. Sensenich, of South Bend, who discussed the Ten Point Program of the American Medical Association. At this meeting the officers were elected for 1948. There were two hundred and fifty members and guests present.

* * *

Kosciusko County Medical Society members met on November eighteenth, in Warsaw. The eighteen members and guests heard Dr. Wayne R. Glock and Dr. Richard Stauffer, of Fort Wayne, discuss the treatment of fractures of the extremities.

Another meeting was held at the home of Dr. T. S. Schuldt, in Pierceton, on December third. At this meeting, at which eleven members were present, a discussion was held regarding a full time health officer. Officers were also elected for 1948.

Lake County Medical Society members held a dinner meeting at the Parramore Hospital, in Crown Point, on November thirteenth. The guest speaker for this meeting was Dr. W. E. Adams, of Chicago, whose subject was "Difficulties in Differential Diagnosis of Cystic Malformations of the Lungs." His talk was accompanied by colored slides.

* * *

Montgomery County Medical Society members met on October sixteenth, at the Culver Hospital, in Crawfordsville. The speaker for this meeting was Dr. Russell S. Henry, of Indianapolis, who spoke on "The Diagnosis and Management of Pulmonary Tuberculosis." Twenty-one members attended the meeting.

Another meeting was held on November twentieth, at the Culver Hospital, in Crawfordsville. Dr. John W. Hendricks, of Indianapolis, conducted the discussion of "Urological Problems of the General Practitioner." This meeting was attended by twenty-two members.

* * *

Owen-Monroe County Medical Society members met on November twenty-eighth at the Indiana University Union Building, in Bloomington. There was a joint presentation of the newer treatments in psychiatric and neurologic diseases by Drs. Earl Mericle and C. Basil Fausset of Indianapolis. Twenty-eight members attended this meeting.

* * *

Tippecanoe County Medical Society members met on October fourteenth, at the Fowler Hotel, in Lafayette. Dr. William J. Baker, of Chicago, presented a paper on "Anomalies of the Urinary Tract," illustrated by lantern slides. Fifty members were in attendance.

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NINETY-NINTH ANNUAL SESSION—INDIANAPOLIS, OCTOBER 26, 27 and 28, 1948

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(To be appointed)

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For Two Years (terms expire Dec. 31, 1949): F. S. Crockett, M.D., Lafayette, and William M. Cockrum, M.D., Evansville. Alternates: Norman M. Beatty, M.D., Indianapolis, and A. M. Mitchell, M.D., Terre Haute.

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2	James H. Crowder, Sullivan	Dec. 31, 1948
3	William H. Garner, New Albany	Dec. 31, 1949
4	O. A. Turner, Madison	Dec. 31, 1950
5	A. M. Mitchell, Terre Haute	Dec. 31, 1948
6	W. U. Kennedy, New Castle	Dec. 31, 1949
7	Cyrus J. Clark, Indianapolis	Dec. 31, 1950
8	E. H. Clauser, Muncie	Dec. 31, 1948
9	Wemple Dodds, Crawfordsville	Dec. 31, 1949
10	William H. Howard, Hammond	Dec. 31, 1950
11	C. S. Black, Warren	Dec. 31, 1948
12	Paul A. Garber, South Whitley	Dec. 31, 1949
13	Alfred Ellison (Chairman), South Bend	Dec. 31, 1950

1947-1948 DISTRICT MEDICAL SOCIETY OFFICERS

District	President	Secretary	Place and date of meeting
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2	W. C. Reed, M.D., Bloomington	J. S. Brown, M.D., Carlisle	Bloomington
3	Keith Hammond, M.D., Paoli	B. E. Sugarman, M.D., French Lick	French Lick, May 26
4	George S. Row, M. D., Osgood	Lloyd W. Hisrich, M.D., Batesville	Batesville
5	Dick J. Steele, M.D., Greencastle	M. C. Topping, M.D., Terre Haute	Greencastle, June 2
6	Will A. Thompson, M.D., Liberty	Robert W. Kuhn, M.D., Wilkinson	Shelbyville, May 12
7	Harry Murphy, M.D., Franklin	Donald E. Wood, M.D., Indianapolis	Indianapolis, May 4
8	Frederick B. Wishard, M.D., Anderson	M. A. Austin, M.D., Anderson	Anderson
9	Milton W. Erdel, M.D., Frankfort	Claude D. Holmes, M.D., Frankfort	Frankfort, May 13
10	Neal Davis, M.D., Lowell	Frank G. Sink, M.D., Remington	October —
11	Stephen D. Malouf, M.D., Peru	O. G. Brubaker, M.D., North Manchester	Wabash, May 19
12	G. T. Bowers, M.D., Fort Wayne	Karl M. Beierlein, M.D., Fort Wayne	Fort Wayne, May 4
13	A. A. Thompson, M.D., Tyner	O. E. Wilson, M.D., Elkhart	South Bend

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All articles must be typewritten, double-spaced, on one side of white paper, with margins of at least one inch. Photographs should be printed on glossy paper. Negatives are not acceptable.

Only a limited number of illustrations can be used with each original article. If an excessive number are submitted for publication, the cost of extra illustrations must be borne by the author.

Contributors are responsible for all statements made in their articles. The editor and editorial board members may not be in agreement with various views expressed by authors, but it is desired to allow authors as great latitude as possible. However, the right is reserved to reduce in length or reject any article.

Articles are accepted for publication only with the understanding that they are submitted for exclusive publication in THE JOURNAL of the Indiana State Medical Association. All communications regarding advertising and subscriptions should be sent to THE JOURNAL of the Indiana State Medical Association, 1017 Hume Mansur Building, Indianapolis 4, Indiana. Communications dealing with editorial matters should be sent to E. M. Shanklin, M.D., Editor, 5141 Hohman Avenue, Hammond, Indiana.



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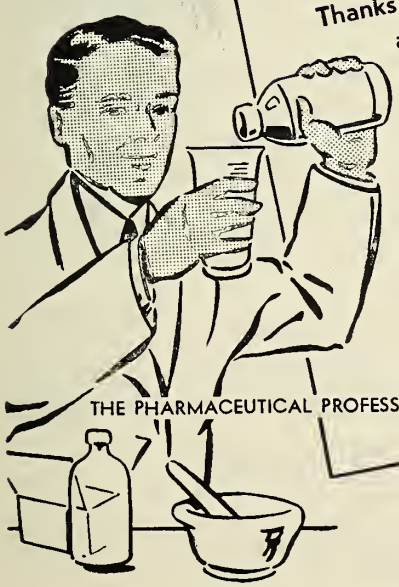
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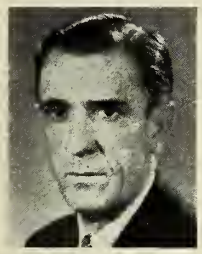
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THE CURRENT STATUS OF INFLUENZAL VACCINES*

L. T. COGGESHALL, M.D.†

CHICAGO

Since the great pandemic of 1918, nineteen widespread epidemics of influenza have occurred in the United States. Although influenza has been recognized as a clinical entity for centuries, it was not until 1933 that a virus was isolated in England[1] from throat washings in individuals with influenza, and this virus is now known as Influenza A.



In 1936 a second strain of influenza virus was isolated independently by Francis and McGill in the United States,[2,3] and, since it differed antigenically and immunologically from the first strain, it was designated as Influenza B. In man, these two strains of influenza virus and their variants produce a sharp upper respiratory infection characterized by fever, chills, low white blood count, extreme prostration, and a moderate amount of upper nasal secretions. These viruses produce infections which, with their closely related variants, constitute all the etiologic agents known to date to be responsible for true influenza and are to be differentiated from the common cold and other upper respiratory infections. The clinician recognizes influenza by its explosive outbreaks, widespread distribution, and a fairly uniform clinical pattern, but the exact diagnosis can be made only in the laboratory.

It is only natural that a disease which produces such severe morbidity and occasionally severe mortality should be attended by serious efforts to prepare a vaccine. Before discovery of the true etiologic agent, attempts at vaccine production were focused on preparations of various bacterial organisms recovered from the involved respiratory passages. Since they were only secondary invaders, they did not assist in curbing epidemics or preventing the disease in the individual and have been discarded by the majority of physicians.

Before entering into a discussion of the virus influenza vaccines, mention should be made of the methods of study. Influenza virus can usually be transferred directly to the chick embryo with filtered human garglings from the acute case, or it can be passed directly to the lungs of mice or ferrets. However, these methods do not work in every instance, and other means must be employed, such as the complement fixation reaction using the living virus as an antigen. Also there is a neutralization test with human serum and living virus.

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* Presented before the Section on General Practice at the annual session of the Indiana State Medical Association in French Lick, on October 29, 1947.

† Chairman, Department of Medicine, The University of Chicago.

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Finally, Hirst[4] has shown that embryonic chicken red cells kept at four degrees centigrade will absorb the virus and, incidentally, that these cells can be agglutinated with homologous antisera. By these methods the epidemiology of influenza since 1933 is well understood.

EPIDEMIOLOGY OF INFLUENZA

As stated, epidemics have been widespread but relatively mild since 1918, at least as far as mortality is concerned. Influenza A is the most common and virulent variety and occurs every two to three years, while Influenza B is milder and occurs every four to six years. Both types occasionally overlap, but as far as the physician is able to determine, they are clinically indistinguishable.

If we take the years 1946 and 1947 as an example, it was found in the United States that influenza did not appear until January, 1947. It was first noted in the various army camps in California, spread rapidly across Colorado and into New Jersey. It soon appeared in the civilian populations and was identified as Influenza A. Last year was the fourth year since its previous peak and the predicted year that Influenza A would occur in epidemic form. Some have predicted that on the basis of its late appearance, March and April, the following year can be expected to reveal many more cases. Whether this prediction materializes remains to be seen.

EFFECT OF THE VACCINE

What is the evidence that influenzal vaccines are of any benefit whatsoever? In the first place, it was shown almost immediately upon the discovery of the virus that it could be adapted to mice and would produce a fatal pneumonia. Smaller doses of virus would produce a nonfatal pneumonia and the mice were immune to subsequent inoculations. It was also found that virus which had been rendered noninfective by formalin or killed by ultraviolet radiation and injected subcutaneously was almost as useful an immunizing agent as the living virus itself. Thus it seems that a successful vaccine for human consumption could be expected without difficulty. Unfortunately, it was not as easy with humans as it was with mice. In the first place, as stated above, there are at least two entirely separate and distinct strains of influenza virus, known as A and B, which not only differ in many important respects, but particularly important is the lack of cross immunity. This fact explains why earlier attempts at vaccination with the human population failed. Since Influenza B was not yet recognized, all early vaccines were made from Influenza A and no protection was afforded for those encountering Influenza B. In 1943-44, Influenza A and B were combined into a simple and single vaccine and given a very adequate test by the Commission on Influenza, Army Epidemiological Board, which carried out extensive immunizations with adequate controls. Soon after these mass immunizations, an epidemic of Influenza A occurred. In the 50,000 vaccinated and controls, it was shown that only 2.2 per cent in the vaccinated group had influenza, while 7.1 per cent of the control group contracted influenza. It was quite apparent that definite but not complete protection was obtained. In 1944-45 these observations were repeated and this time the infection which followed was Influenza B. The results showed that 9.9 per cent of the cases in the control group contracted Influenza B, while 1.1 per cent of the vaccinated group became ill. This study was duplicated in many areas and the results were essentially the same.[4,5,6] The year 1945-46 showed comparable results for those recently immunized—namely, ten cases of influenza in the control group to one in the vaccinated group. However, the epidemic which occurred in March, 1947, was identified as Influenza A and all the vaccines prepared were composed of virus A and B in equal parts, and this should have insured comparable protection. Yet practically no protection occurred in spite of the fact that many were vaccinated at the optimal time—namely, three weeks before the epidemic appeared.[7] Also, in unpublished studies by Loosli at The University of Chicago, 790 students were vaccinated in October, 1946, and, when it became evident that the epidemic could be expected in the spring, another group of students and employees were vaccinated in February. The reason for the lack of effective immunization was soon discovered. Although the virus isolated in 1947 was identified as Influenza A, it was a variant in that the strains used in the preparation of the vaccine did not confer protection against it. The newer vaccines will now include this new strain.

From all available evidence, vaccination is followed within ten days by protection. The duration of this effectiveness is not yet known. However, it is known that resistance is definite for a period of three to six months. Whether protection against acute disease can be correlated by antibody levels is still in doubt. It can be shown that the antibody peak as measured by neutralization tests reaches its height about two weeks after inoculation. In four or five months, it has declined one-third its

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original level and to about one-fifth its peak level in one year, although it still is above the prevaccination level. This, however, does not mean that there is absolute correlation between the protection or resistance of the individual as demonstrated by the occurrence of the acute disease and these antibody levels. Likewise, there is individual variation. For example, certain individuals lose their antibody titer very rapidly, whereas others retain their peaks for a considerable period of time, although high titers are usually not found in individuals preceding the acute stage of the disease. There is little evidence to indicate that one vaccination after another has any distinct or appreciable advantage.

SPECIFICITY OF THE VACCINE

Accumulated studies today show very definitely that protection, even though incomplete, can be obtained against Influenza A and Influenza B but it has no effect whatsoever against common colds or other unidentified infections. There is no response or protective effect against the so-called intestinal influenzas, virus pneumonias, or bacterial pneumonias. It is highly probable that there remain other viruses not yet identified which are not protected against with the current vaccines, but when discovered and included in the makeup of a multi- or polyvalent vaccine, will make for still greater effectiveness. It is also quite apparent that there is no satisfactory evidence that current vaccines would protect against an epidemic such as the one that occurred in 1918. There is every reason to believe, however, that should such an epidemic reappear, it would be possible to prepare a vaccine and immunize the population with far different results than those which occurred at that time. This assumption is largely predicated on the past history of the 1918 epidemic which shows that in the fall of the preceding year the disease occurred in a rather mild form and the real epidemic did not occur until the following year, thus furnishing time for isolation of the virus and preparation of a vaccine.

REACTIONS AND DOSAGES

In general, the reactions to the subcutaneous administration of the vaccine are not too severe and not unlike that generally elicited by typhoid vaccine. There is usually redness and tenderness for a few days at the site of the inoculation. Frequently, an indurated area persists for a week or more. Those working in this field believe that the degree of reaction is related to the amount of virus present and thus to the amount of protection afforded. Children are usually more reactive to vaccines than adults. The dosage for children, therefore, is usually smaller than that for adults—for example, 1/10 of a cc. to 1/3 of a cc. for children under five years of age. Up to ten years, 1/2 of a cc., and ten years of age or older, a full dose of 1 cc. is usually given.

Preliminary studies indicate the fractional immunization, particularly in children, reduces the severity of the reaction and still results in a satisfactory antibody rise. Likewise, it has been found that doses of 0.1 cc. intradermally, used as "booster" doses, are effective in elevating antibody levels. However, neither of these studies has been followed sufficiently to determine whether they confer protection against the acute attack.

Practically all of the vaccines at present employed are made from the allantoic fluid of the developing chick, which ordinarily is not highly sensitizing. Although an extremely large number of individuals have been vaccinated, any type of severe reaction has been extremely rare; nevertheless, it is highly essential that careful histories be taken of all individuals to determine whether asthma or other types of sensitivity to chicken and egg are present. Epinephrine should always be available when dealing with persons known to have mild sensitivity to eggs and skin tests should be done on all individuals before the vaccine is administered. If there is any question, vaccine should be withheld. There are no data to indicate that vaccines themselves produce any sensitizing effect since individuals who have been vaccinated repeatedly show no evidence of sensitization. This will be a problem that will confront the immunologist constantly as more and more vaccines are being made from embryonic egg material.

Practically all the vaccines in use today are made from embryonic chick eggs from which the virus has been withdrawn and been concentrated on chicken erythrocytes. Various biological houses have developed preparations by precipitating and centrifuging the virus. All these preparations, which contain A, B, and FM (1947 strain), are licensed by the National Institute of Health of the U. S. Public Health Service and are carefully tested before they are released. Although it is certain there will be continual improvements in the influenzal vaccine of the future, it can be stated that the present vaccines contain a minimal amount of reactive material and sufficient virus content to ensure effective immunization.

Finally, I have left the recommendations for use to the last in order not to confuse the reader. Many of you are practitioners, rather than investigators, and must decide whom and when to vaccinate. As stated above, Influenza A occurs every two or three years and Influenza B at intervals of every four to six years. On this basis it would be expected that we would be able to predict a rather uniform regularity as to when to vaccinate. In spite of these rather definite intervals, the outbreaks may occur early in the year or late in the spring. Not all epidemics have been widespread. However, two points should be kept in mind—namely, that immunity follows vaccination within ten days; it persists from four to six months and probably for one year. It would seem wise, there-

fore, to immunize the older individuals in whom there is a high case fatality rate; or those in whom infection presents an undue risk, such as the cardiac, diabetic, et cetera. Also, industrial groups or essential public service employees, where major epidemics would disrupt important facilities for the general public, should be immunized, and other groups such as institutionalized individuals in asylums, orphanages, universities, schools, et cetera. The highest incidence of the disease is among children, but the mortality here is extremely low. It is wise to vaccinate in the late autumn or early winter and, as stated, if the conditions seem appropriate, vaccination can actually be withheld until the epidemic appears on the nearby horizon. Certainly in those individuals who are immediately accessible, it is not necessary to immunize sooner than one or two weeks before the impending epidemic. In other areas, where populations are scattered, it is probably a wise precaution to immunize some time in advance. Francis,[8] in a recent excellent article, has presented succinct recommendations for the use of influenza vaccines.

In conclusion, current influenza vaccines afford considerable protection against Influenza Types A and B, and successful results are obtained when administered with an understanding of all the factors involved. However, it cannot be considered a panacea for the prevention of all types of upper and lower respiratory tract infections.

8. Report of the Study Committee on Influenza Vaccination of the Subcommittee on Evaluation of Administrative Practices, Committee on Administrative Practice, American Public Health Assn., Thomas Francis, Jr., Chairman of Study Committee: The Present Status of Vaccination Against Influenza. *Am. J. Pub. Health*, 37: 1109-1112, No. 9, 1947.

A.M.A. STATEMENT ON PRESIDENT TRUMAN'S MESSAGE

Dr. E. L. Henderson, of Louisville, Ky., speaking on behalf of the officers and the Board of Trustees of the American Medical Association as chairman, made the following comment upon President Truman's proposed expansion of federal health program in his State of the Union message. Dr. Henderson's statement was issued while the A.M.A., representing 137,000 physicians and surgeons, was meeting in Cleveland in Interim Session:

"The ideals of freedom which the President mentioned in reference to health find their greatest expression when the medical service needs of the American people are met on a local community and state basis. The American Medical Association is effecting this program through its own 10-point National Health Program.

"The Association is encouraging the enrollment of all persons in the United States in community-sponsored plans for prepaying hospital and doctor bills.

"Already 29,000,000 Americans are protected against the costs of hospitalization through the Blue Cross. These plans are available to the citizens of 47 of our 48 states and in the District of Columbia.

"Prepayment of doctor bills in medical society approved plans are now operating in 38 states, and in the 10 remaining states and the District of Columbia similar plans for paying doctor bills by budgeting in advance are being developed. Enrollment in these plans are in the millions.

"Additional millions are budgeting their hospital and doctor bills through group and individual policies in long established and financially proven private insurance companies.

"These voluntary approaches to solving America's health problem have taken us far on the way toward meeting the President's standard of 'a national system of payment for medical care based on well-tried insurance principles.'

"The American Medical Association has fully approved grants-in-aid to states to aid in paying for hospital and doctor care for the medically indigent. It is our belief that the great bulk of America's 140,000,000 people will continue to take care of their own needs as they have always done in a voluntary way.

"The American Medical Association agrees with the President that our great nation should not allow its citizens to suffer needlessly from the lack of proper medical care. Through its National Health Program the American Medical Association is furthering the advancement of medical science through research, extending medical care to rural areas, improving industrial health, bettering medical education, expanding preventive medical services, providing increased pre-natal, child, and mother care, and fostering construction of new hospitals and health centers.

"We are proud of the President's acknowledgment of the remarkable contribution made to date to the nation's health by the medical profession when he said: 'We are rightly proud of the high standards of medical care we know how to provide in the United States.'

"In cooperation with local leaders everywhere the medical profession will continue to strive to raise still further the level of medical care, promote its widest distribution and to aid the people in meeting conveniently its costs."

STREPTOMYCIN IN THE TREATMENT OF TULAREMIA*

LEE FOSHAY, M.D.†

CINCINNATI

So little quantitative information on the relations between *Bacterium tularense* and streptomycin, either *in vitro* or *in vivo*, has been made generally available that most clinicians are using the antibiotic without a clear grasp of its degree of effectiveness against this organism. All studies agree that the *in vitro* bacteriostatic concentration is about 0.3 microgram per cc. of median.[1-3] Tamura has shown that the *in vitro* bactericidal levels are 1 μg/cc. for thirty minutes, 2 μg/cc. for eight minutes, and 6 μg/cc. for one minute. In addition, repeated studies have shown that for the wholly nonresistant white mouse the medium effective dose, that amount which always spared half of all animals challenged with about 100 MLD, was about a total of 350 μg for the 20 gram mouse, or 17 μg/gm.[3] On the basis of these data one might predict that streptomycin would be an extremely effective therapeutic agent for the disease in man who, in contrast to the mouse, develops a high degree of resistance once he is infected, and that highly significant alterations in the clinical course of the disease should be possible with total dosage in the region of 2 to 3 grams per patient.



The value of streptomycin in the treatment of tularemia is readily demonstrated either by group comparisons or by careful studies of individual patients. The present treated group is composed of records of patients treated in our hospitals, of published records, and of records generously supplied by many physicians. Many patients were treated during years when streptomycin was scarce, and for this reason the composition of the treated group, as shown in Table 1, shows a high degree of selection with respect to extensive and severe infections, being heavily weighted for the typhoidal clinical type and for tularemic pneumonia in all types. Any agent that could induce significant favorable alterations of morbidity and mortality in this group would therefore be a highly effective one.

Streptomycin was usually administered by intramuscular injection every three or four hours, occasionally by continuous intravenous or subcutaneous drips. There was little advantage in the latter procedures. Dosage ranged from 0.015 gm. every four hours to 0.5 gm. every three hours, the total dosage varying from 0.64 to 42 grams per patient. At a dosage rate of 0.05 gm. every three hours the blood streptomycin levels were 4 to 6.6 μg/cc.; at dosage of 0.15 gm. every three hours the blood levels were 25 to 32 μg/cc. A comparison of these dosages and blood levels with the *in vitro* bactericidal levels is illuminating and profitable, even though it may not indicate reliably the dosage requirements.

The typical clinical response to streptomycin therapy is usually prompt in appearance and striking in character. Fever is commonly in or near the normal range within forty-eight or seventy-two hours. A striking release from headache, mental depression, and bodily aches and pains often occurs within the first day. By the third day there is usually a definite reduction in the size of buboes, lessened pain in those regions and in the primary lesions, and occasionally early healing of primary ulcers. If treatment is given during the papular stage of the primary lesion ulceration does not occur, an event of considerable importance since it prevents secondary pyogenic infection of ulcers and a consequent increased frequency of suppuration of buboes. Stuporous patients with extensive pneumonic or serosal cavity exudates usually show reversion to mental clarity in from two to five days, an accelerated onset of beginning resolution of exudates, usually apparent by the twentieth day, and accelerated clearing of exudates, usually completed in five to six weeks.

The comparative results of streptomycin and hyperimmune serum therapy are shown in Table 2. The serum therapy figures are included because it is believed that they represent the best that serum can accomplish in this disease. Note that streptomycin induced better results in most of the

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* Presented before the General Meeting of the Indiana State Medical Association at French Lick, on October 30, 1947.

† Department of Bacteriology, College of Medicine, University of Cincinnati, and the Cincinnati General Hospital.

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3. Tamura, J. T. and Suyemoto, W.: Quantitative Aspects of Streptomycin Therapy in Experimental Tularemia. *J. Bact.*, 54: 84, 1947.

TABLE I

Clinical types	Streptomycin Treated (83) No. of cases	Type frequency per cent	No. with pneumonia	Type pneumonia rate per cent	Unselected (832) Type frequency per cent	Type pneumonia rate per cent
Ulceroglandular	61	73.5	15	24.6	87	15
Oculoglandular	2	2.4	1	50	3	13
Glandular	2	2.4	1	50	2	10
Typhoidal	18	21.7	16	89	8	51
Total	83		33	40		18

The distribution of the clinical types and the pneumonia rates for the patients in the treated group, compared with the type frequency and pneumonia rate of 832 unselected tularemia patients.

major aspects of morbidity even though it was administered later in the course of disease by an average of three days. It is apparent that the disease was shortened by about one-half by streptomycin therapy. Note, however, that suppuration of buboes was not completely prevented. With small groups of patients with a disease that is naturally highly variable in length and severity, and one that is made still more variable by the time in the course of disease at which therapy is administered, a fairer method of comparison is the use of the therapy-to-recovery interval, the time that elapses between administration of therapy and the return to full time, uninterrupted, normal occupations. Streptomycin has reduced this period to a new low level of thirty-nine days.

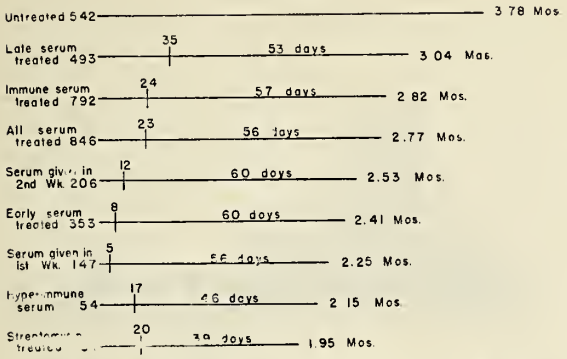
A comparison of the therapy-to-recovery intervals which various treated groups have experienced is shown in Figure 1. Administration of immune serum at various mean days of disease between the thirty-fifth and the fifth caused a progressive shortening of the total duration of disease. The earlier the therapy the shorter the disease, but regardless of the time of therapy it still required about fifty-five days to establish recovery. The first departure from this figure, which had remained constant for many years of serum therapy, followed the introduction of a better, hyperimmune serum, even though this serum was administered at about the middle of the third week of disease. The introduction of streptomycin has reduced the length of the therapy-to-recovery still more significantly even though the treated group received it near the end of the third week of disease. Note that for the first time the mean duration of disease has been reduced below two months. The therapy-to-recovery interval probably represents the time needed by the surviving patient to restore pathologic and pathologic-physiologic changes to normal. Immune serum, a fairly good agent that helped the variably efficient defense apparatus of patients only by virtue of its bacteriostatic action,

TABLE II

Comparison of means from the control and hyperimmune serum treated groups with averages for the streptomycin treated group.

Duration of:		Untreated N = 542	Hyperimmune Serum N = 54	Streptomycin N = 81
Disease	Mos.	3.78	2.15	1.95
Disability	"	3.12	1.87	1.96
Adenopathy	"	3.50	1.78	1.59
Fever	days	30.6	28.9	26
Bedridden	"	46.8	23.3	23
Primary lesions	"	40.6	30.9	24
Day of disease therapy started			17	20
Suppurative adenitis, per cent		56	26.5	27.7
Mortality, per cent		6	3.3	2.4
Therapy-to-recovery interval	days		46	39

FIGURE I



The horizontal lines, drawn to scale, represent the mean duration of disease for each group. The number of patients comprising each group is at the left end of the line. The vertical lines indicate the mean days of disease upon which therapy was first administered to patients of the treated groups. The portions of the horizontal lines that lie to the right of the vertical lines represent the therapy-to-recovery intervals.

set this period at about fifty-five days. Hyperimmune serum was a better bacteriostatic agent, and streptomycin is not only a still better bacteriostatic agent, but one that is also largely bactericidal, operating in the infected patient far more independently of the natural defense apparatus and far more efficiently. As experience and skill in streptomycin therapy increases we should eventually be able to determine the minimum therapy-to-recovery interval that is irreducible only because of the pathologic lesions themselves. It is apparent that group analysis offers ample evidence that streptomycin is an extremely effective agent in tularemia.

Indeed, the efficacy of streptomycin is of so high an order that it has actually engendered the only unfavorable criticism heard up till now. This paradoxical situation exists only because some physicians have failed to appreciate its degree of effectiveness in this disease and, in consequence, have failed to grasp the significance of certain disturbing events that may follow its administration. These adverse or doubtful opinions are usually traceable to a clinical experience of which the following may be typical. The patient had tularemic pneumonia, with or without an infected pleural effusion. The exudates were large and the patient was profoundly, perhaps dangerously, ill. Six grams of streptomycin were obtained and administered at the rate of 2 or 3 grams a day. There occurred a prompt and marked fall in temperature toward the normal level, with associated lowering of the pulse and respiratory rate, a restoration of a stuporous patient to a state of reasonably normal clarity, and marked lessening of pain in primary lesions and in regions of buboes, with reduction in size of the latter. After a few days of continued improvement a septic type of fever recurred, with daily maxima rising slowly and persistently, and perhaps the patient became less attentive or even drowsy. In the belief that these symptoms betrayed a therapeutic release and a tularemic relapse, more streptomycin was obtained and administered in large doses for eight to ten days, finally achieving a reduction in temperature and also a satisfied feeling of a hard battle well won with a new drug for which the early, enthusiastic claims must obviously be judiciously tempered in the light of the recent experience.

The crux of the matter is the cause for the recurrent fever and other symptoms. Usually only fever recurs, the patient actually improving day by day despite the rising temperature, but occasionally drowsiness or even marked somnolence may be a prominent feature. The best available data that typify events and betray their cause are recorded in the clinical chart published by Cohen and Lasser[4] to illustrate the effect of streptomycin in a desperately ill man with extensive tularemic pneumonia. The chart shows a marked and sustained fall in the serum agglutinin titer during the latter three-quarters of the period of recurrent fever, the titer rising spontaneously again thereafter. This *in vivo* antibody absorption could only be caused under these circumstances by circulating soluble antigen derived from the rapidly killed bacteria in the exudate which is typically rich in macrophage cells. The posttherapeutic symptoms are therefore an analogue of the Herxheimer reaction, a consequence of a highly efficient therapeutic action and not an indication for more therapy. The majority of the infecting bacteria have already been subjected to accelerated phagocytosis, and it is not apparent how administration of additional streptomycin could be of any further use. It is noteworthy that the degree and duration of fever vary with the size and duration of exudates. The final disappearance of fever often coincides with the first evidence of definite resolution of the exudate. It is also noteworthy that the fever lasts for just so many days regardless of whether additional streptomycin is or is not administered. This reaction does not occur in patients without sizeable exudates, but it should be anticipated and its nature understood in all treated patients who have exudates of large size. It is probable that, given a patient with extensive pneumonia, the larger the initial dosage of streptomycin the more exaggerated this reaction will become, and therefore the more apt to be misunderstood.

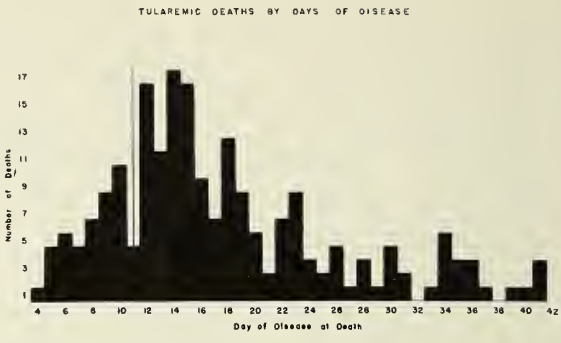
Although there is general agreement on the efficacy of streptomycin in tularemia[5–20] there is clearly no uniformity of opinion with respect to dosage. Since many reported, dramatic recoveries have followed the use of 2 to 5 grams as total dosage, with some patients in the desperately ill category, it seems reasonable to conclude that dos-

4. Cohen, R. B. and Lasser, R.: Primary Tularemic Pneumonia Treated with Streptomycin. *J.A.M.A.*, 131: 1126, 1946.

5. Foshay, L. and Pasternack, A. B. Streptomycin treatment of tularemia. *J.A.M.A.*, 130:393, 1946.

age in excess of 10 grams is a sheer waste of a valuable product as well as an invitation to increased frequency and severity of toxic and other untoward reactions. From our own experience I would infer that the observed frequency of suppurative adenitis is an indication that a total dosage of less than 1.5 grams is too small for patients with buboes with diameters greater than 3 cm. Optimal dosage probably falls somewhere between 2 and 5 grams. Although an attempt to determine the minimal adequate dosage in one desperately ill patient indicated that a total of 2 grams was ample for a comatose man with bilateral pneumonia of six days' duration[21], it is quite possible that this quantity might be insufficient for a patient who was even nearer the point at which the downward course of events becomes irreversible. There is no evidence yet that 0.5 gram per day for two days, followed by 0.25 gram per day for four days, or that 0.5 gram per day for six days is not adequate dosage. These doses mean a total administration of either 2 or 3 grams per patient, and they will usually be sufficient even for infections of great severity and will provoke

FIGURE II



the minimal number of untoward reactions. Curative but excessive therapy that leaves a tularemia victim helpless with vertigo a year later is surely a mixed blessing.

There were two deaths in this series, one on the twenty-sixth day of disease due to complications of pulmonary abscesses, and one on the sixth day of disease due to delayed institution of proper therapy. The fulminating infections kill people in the same time that this disease normally kills the nonresistant rabbit, in four to ten days. The cumulative result of tabulating deaths by the day of disease upon which death occurred is shown graphically in Figure 2, which represents deaths of 198 patients during the first six weeks of illness, of whom 114 came to necropsy. It is apparent that the greatest number of deaths occurred between the twelfth and eighteenth days of disease; that the most dangerous period of this infection is the latter half of the second week and the first half of the third week. This explains better than words just how early treatment should be in order to prevent most deaths.

This group of fatalities is divided arbitrarily by a vertical line through the eleventh day of disease. The great majority of deaths to the right of this line occurred in people who had serum agglutinins present before death. They had already reacted against the infection, but inadequately. Nevertheless, they had reached the antibody phase of the infection, and it is probable that an agent as effective as streptomycin, if given early enough, would have prevented the great majority of these deaths. The thirty-eight deaths, 19 per cent of the total, to the left of the vertical line occurred from the fourth to the tenth days of disease. The great majority of these patients with fulminating infections did not have serum agglutinins at death, and many failed to show them in postmortem samples. These individuals died in the antigenic phase of the disease, exhibiting no more resistance to the infection than do mice or rabbits. It is clear that survival of these nonresistant persons, who appear with an estimated frequency of about 1 in each 500 tularemia patients, depends solely upon early diagnosis and early treatment. Since serum agglutinins never appear before the eighth day

6. Abel, O., Jr. The use of Streptomycin in tularemia. *J. Missouri M. A.*, 43:167, 1946.

7. Heather, A. J. and Scott, E. G. Tularemia: a case treated with streptomycin. *Delaware State M. J.*, 18:148, 1946.

8. Peterson, R. L. and Parker, R. R. Tularemic pneumonia: treatment with streptomycin. *Pub. H. Rep.*, 61:1231, 1946.

9. Kursban, N. J. and Foshay, L. Tularemia acquired from the pheasant. *J.A.M.A.*, 131:1943, 1946.

10. Witherington, J. B. Tularemia treated with streptomycin sulfate. *Memphis M. J.*, 21:139, 1946.

11. Gordon, A. M. Streptomycin in tularemia. *J.A.M.A.*, 132:21, 1946.

12. Howe, C., Coriell, L. L., Bookwalter, H. L. and Ellingson, H. V. Streptomycin treatment in tularemia. *J.A.M.A.*, 132:195, 1946.

13. Hartnett, W. G. and Mollica, S. G. Tularemia: treatment of a case with streptomycin. *South. M. J.*, 39:774, 1946.

14. Atwell, R. J. and Smith, D. T. Primary tularemia pneumonia treated with streptomycin: report of two cases. *South. M. J.*, 39:858, 1946.

15. Hunt, J. S. Pleuropulmonary tularemia: observations on twelve cases treated with streptomycin. *Ann. Int. Med.*, 26:263, 1947.

16. Foshay, L. Treatment of tularemia with streptomycin. *Am. J. Med.*, 2:467, 1947.

17. Draper, A. J. Streptomycin in tularemia pneumonia: two case reports. *No. Car. M. J.*, 8:392, 1947.

18. Falk, A. Water-borne tularemia. *Minnesota Med.*, 30:849, 1947.

19. Pulaski, E. J. and Amspacher, W. H. Streptomycin therapy of tularemia in U. S. Army hospitals. *Am. J. Med. Sci.*, 214:144, 1947.

20. Ossman, J. A. and Bohrer, E. R. Tularemia pneumonia (opossum as source of infection). *J. Missouri M. A.*, 44:659, 1947.

21. Foshay, L.: A Comparative Study of the Treatment of Tularemia with Immune Serum, Hyperimmune Serum and Streptomycin. *Am. J. Med.*, 1: 180, 1946.

of disease, and often not before the twelfth, the agglutination test is of no aid with this group. Intradermal test reactions require forty-eight hours for their development. This equals one-quarter of the average survival period for the group. Hence it is futile to depend on this test for help. There is, indeed, no useful available diagnostic aid for such patients. They must be diagnosed solely on the basis of appropriate animal or arthropod contact at a season when tularemia can be transmitted by these agents, by an incubation period appropriate for this infection, two to five days as a rule, and by the nature of the onset and the clinical course. Those in whom pneumonia dominates the picture are apt to be the most misleading. A follow-up of forty persons who came to the General Hospital complaining of an abrupt onset of a severe, febrile, prostrating disease within a week after handling wild rabbits showed that all forty had tularemia. Streptomycin should be given at once to such patients. It will not prevent the serum agglutination test from becoming positive at the usual time, thus guaranteeing an eventual diagnosis if the patient survives. This procedure is the only chance for survival that the non-resistant patient has, and the semi-occasional waste of drug or money owing to misdiagnosis will always be more than compensated for by the number of lives that will have been saved. Since streptomycin can save the lives of the wholly non-resistant mouse, guinea pig or rabbit if it is administered early enough after challenge, there is no known reason why it could not save the lives of nonresistant people if it were administered early enough.

SUMMARY

Streptomycin is an extremely effective therapeutic agent in tularemia. It is so effective that it causes analogues of the Herxheimer reaction in most patients who have infected cellular or fluid exudates of any considerable size. Critical examination of the patient as well as the demonstration of a fall in the serum agglutinin titer should distinguish this reaction from relapsing or recurrent tularemic symptoms. If streptomycin is administered in the recommended dosage it is very unlikely that a relapse could occur. Much of the recent mortality caused by tularemia has been prevented by early therapy, even some that was due to fulminant infections which, until recent years, have seldom been associated with survival.

CEREBRAL PALSY

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THIS should be considered as a group of diseases with varied pathologies rather than as a single entity. It is well defined as a neuromuscular disability arising as the result of defect, injury or disease to the upper motor neurones and associated structures manifest in the musculature of the body by spasticity, athetosis, ataxia, tremor, rigidity, flaccidity, or a combination of such patterns. There is, as a rule, a great deal of muscle weakness in addition to these various forms of muscular incoordination and disturbance of tone. The anatomic distribution will vary from case to case.

With such a clinical picture it is not difficult to surmise that the etiology will be equally varied. It is helpful to classify the cases of cerebral palsy as either prenatal, natal or postnatal, according to the time of their occurrence.

The *prenatal* group consists of those in which there is a primary congenital disturbance in the development of the nervous system, such as a porencephalic cyst, a microgyria, or a profound retardation of the cerebral development. There may also be reactions to extreme metabolic or toxic disturbances in the mother, but these are relatively rare.

The *natal* group of cerebral palsy are those associated with birth injury, either of a hemorrhagic or of an anoxic nature. It was felt, formerly, that this was a common cause, and yet a more recent evaluation of large experiences has revealed that this represents only a small part of the total case-load.

Vitamin K deficiency and Rh incompatibilities account for only a few of these cases of cerebral palsy, but they do, of course, represent fields in which specific therapeutic endeavor will be beneficial.

The *postnatal* group includes those unfortunate victims who have started life in a normal manner and then suffered an encephalitic or hemorrhagic disturbance of the nervous system, due to the various exanthematous diseases of childhood, trauma, or hemorrhage due to congenital fragility of the cerebral vessels. It includes those who suffer "stroke" from any cause at any age.

The numerical symbols employed by Doctor Phelps are of service in visualizing the incidence and prognosis of cerebral palsy. About seven cases occur in each 100,000 births; one of these will die; one will be so mild as to escape all but the most

careful diagnosis; two will be feebleminded; three will be trainable. Of these trainable two will be home-bound and the other will accept schooling in the ordinary sense. These three trainable children will, in 90 per cent of the cases, prove to be employable after suitable training. In more than one-half of these employable cerebral palsy victims, it will be possible for them to perform work of clerical, skilled or professional nature.

When endeavoring to treat any considerable number of such individuals, it is necessary first to screen them carefully according to their gross intelligence in so far as that is possible; second, to describe them in terms of their clinical patterns, (their total muscular power and balance, and the distribution of their disability). Before adequate prognosis can be given, it is desirable to secure psychometry of the most careful type based on techniques that are feasible to these particular children. Such psychometric examination should be repeated at intervals of several months so that a base line can be erected, upon which can be based the total intellectual anticipation.

A summary of the psychometric examinations performed over a period of years at the Riley Hospital Cerebral Palsy Clinic revealed that many of the youngsters referred there were feebleminded and not strictly of a cerebral palsy nature. The median I. Q. of the true cerebral palsies was 75.5. This is rather commonly experienced in the work and careful differentiation should be made between the true cerebral palsy and the child who is feebleminded or mentally retarded without essential motor defect. It is desirable, before the results of psychometric examination be accepted, that careful study be made of the abilities of the child to hear and to see, for most tests require vision and hearing. It has been found that all too often as a complication of certain types of cerebral palsy there is pitch deafness and unusual types of visual defect. These visual defects may be in terms of refractive error or visual field limitation, but are often purely motor in nature.

Treatment should, from the very start, choose as its objective the fullest development of all the potentialities of the individual patient. Great emphasis should be placed upon the achievement of speech and facial control in order that early communication of the child with his environment may be achieved. Use of the hands in the fundamental skills of living, such as eating, dressing, toilet and writing, are without question the most important achievements of such a child. It is well to think of locomotion and the use of the lower extremeties as important, and yet, perhaps of secondary importance to speech and handiwork. It is quite possible to achieve a satisfactory degree of rehabilitation of a patient without the achievement of locomotion. For example, a person able to carry on in a wheel chair and earn his own livelihood may find a measure of contentment based purely on the achievement of speech and the use of his hands.

Before launching intensive efforts in the various special therapeutic fields, it is well that the patient be examined and thoroughly evaluated from a medical and surgical point of view. As with others, a cerebral palsy victim may suffer from any other disease, and so a thorough general medical examination is mandatory. It is then well that neurologic evaluation be made, both in the neurologic and psychiatric realms. The orthopedist, who is often responsible for the over-all picture of these victims, as well as their particular surgical problems, finds it necessary to correlate the general medical and the neuropsychiatric evaluations into his own evaluation of the surgical and therapeutic problems. It is sometimes possible for the physician to give certain sedative and relaxing drugs with real benefit and this particular field is now being diligently explored. It is not fair to say that great contributions have yet been made or that great promise has yet been shown, for many of the drugs have fallen far short of our original expectation. It is unfortunate that the public press has regaled us with thoughts and promises of cure. Psychiatric work with these groups has also been slow to achieve great benefits but this varies with the indications of the individual case and should always be made available.

The surgery to the central nervous system has proved to be extremely dangerous and so limited in the benefits derived that little is done at the present time. Surgery to the peripheral nervous system is often of benefit. The Stoffel neurectomy is a classical procedure which is often helpful to the spastic type of cerebral palsy when the indications are clear. Obturator and popliteal neurectomies are the most successful of this group of procedures. Careful consideration must always be given to both muscle power and balance, present before and expectant after the surgical procedure. Other than the correction of manifest bone and joint deformity, the orthopedic surgeon runs into such particular tasks as the lengthening of tendons, the transfer of tendons to balance muscle power, and the stabilization of decompensated joints.

The use of surgery is never helpful in the ataxic case and indications for surgery are extremely rare in the athetoid type of case. Here again each patient demands detailed study.

The published works of Green and McDermitt and McCarroll and Swartzman in regard to the surgery of cerebral palsy are quite revealing. The experiences of the Riley Hospital Clinic over a period of ten years tend to substantiate the conclusions reached by these investigators. We have been happy with the obturator neurectomy as performed by Chandler, and with the Durham rotator section. Popliteal neurectomy has been especially helpful in those with ankle clonus in the mixed

spastic type and is often combined with open Achilles tendon lengthening where contracture is present. For pronation deformity of the forearm we have found that pronator stripping or bony derotation have been of more lasting benefit than median neurectomy. Transfer of the flexor tendons to the extensor tendons for wrist flexion deformity have been helpful and may be supplemented by a wrist fusion to good advantage. Carpectomy has also been done in a few of such cases with beneficial end results. When subtalar arthrodesis has proved necessary a modified Lambrinudi type of procedure has now replaced the formerly used triple arthrodesis.

The use of braces is almost as varied as the clinical picture of the cerebral palsy cases. It varies also with the different men working in the field. The use of carefully fitted and faithfully applied night splints have been one of the most effectual means for the correction and prevention of equinus. We have strong preference for that type of brace that has an attached shoe, which can be adjusted by means of wing-nut or by moulded steel wire. Tension of a spring type such as the Klenzak brace is not of value in the work with cerebral palsy. There is some question in our minds as to the wisdom of the various types of elastic elevators and twisters which have been classically described in this field. Certainly it is fair to say that braces have not been used enough, have not been sufficiently well designed, and have not been coordinated sufficiently with the training program and the occasionally necessary surgery. This field and the coordination of these techniques require further study.

In the special fields of occupational, physical and speech therapies, it is quite important that the program of treatment for each individual cerebral palsy victim be directed in accordance with his need, and this usually requires careful consideration by both the doctor and the therapist. Such programs must also be adapted to the home situation of the child, for it is rarely possible to carry on much of what amounts to a lifelong program in an institution. It is not fair to tell a cerebral palsy victim or his parents that a few weeks or a few months in a hospital or school will solve his problems. These are merely episodes in a long-range program which combines all the contributions of the various therapists and teachers under the direction of the skilled physician, with the help of the parents, friends and employers. An active therapeutic program, combined with the use of surgery and braces as indicated, must be blended carefully into the schooling and vocational program in order to achieve the highest degree of rehabilitation and the satisfactory placement of the patient in community life.

It is now ten years since the Cerebral Palsy Clinic was established at Riley Hospital. This project for the treatment of such children is under the supervision of the Orthopedic Department, with consultation by the Neurologic and Pediatric Staffs. Services offered in the Cerebral Palsy Clinic consist of physical therapy, occupational therapy, speech therapy, and psychometric evaluation.

The patient load is cared for according to three plans:

The clinic review system cares for the largest portion. It is by this plan that patients attend the clinic at about three month intervals. Here the patient is examined by the doctor and members of the clinic staff, and home treatment is taught to the mother or person who cares for the child. The patient is examined by the neurologist and clinical psychologist at the initial visit and thereafter as necessary. Physical, occupational and speech therapy are given as needed. All patients are examined by the orthopedist and special therapists at each visit. This home training program has proved very satisfactory and seems to be the best way to treat a large number of patients.

The in-patient program provides for the treatment of from six to eight patients at a time. These are admitted to the hospital for intensive training over a period of several weeks or months and are treated in the Cerebral Palsy Clinic. They are brought to the clinic for half day periods, at which time they are given all their treatments, remedial work and group activities. These patients are selected on a basis of favorable home cooperation, established need for training or surgery, and a normal range of intelligence.

The out-patient program provides treatment two or three times weekly for a group of cerebral palsy patients whose homes are in Indianapolis. There is also a group of children who are placed in boarding homes in Indianapolis. Most of these children attend the James E. Roberts School for Crippled Children where a portion of their treatment is given. The transportation for these children is provided either by their parents or by a school bus.

Children from infancy to the age of twenty-one years are eligible for care under these Crippled Children's Services. Application for care is made through the local welfare department, which in turn refers the case to the state department. Upon acceptance of a case, an appointment is made for clinic care at the James Whitcomb Riley Hospital.

To date there have been more than 1,200 patients served by the Cerebral Palsy Clinic. Intensive training in the hospital has been given to 300 of these, and home programs under the supervision of the clinic, with the aid of field services, has been given to the remainder. About 100 cases of this total demonstrated so much mental and motor retardation that institutionalization resulted. Surgery has represented a relatively small portion of the entire program. Only 283 patients were treated by operative means. Bracing is being used more than in the early days of the clinic. Cooperation with the James E. Roberts School for Crippled

Children has been very close, and the clinic has been utilizing similar services throughout the state, as well as the Vocational Rehabilitation Division, in the achievement of vocational guidance, training and placement.

The broad field of cerebral palsy comprises some of the most perplexing problems of all medicine. It is not well for us to dwell entirely upon detailed procedures for there are no completely specific or adequate procedures available in this field. It is a matter of train, train, train, over a period of years, and honest anticipation of an end result which still contains a high degree of disability for the ordinary functions of living. Even the best trained athetoid remains a terribly handicapped person. The most completely treated spastic still carries a residual stigma. The ataxic never regains his equilibrium, and so on through the various patterns; this group of diseases or type of disability leaves an indelible mark.

It is fortunate that a great interest in the subject is now present throughout the country. It is not, however, desirable that this enthusiasm shall result in a foolish expenditure of large sums of money in the pursuit of an unobtainable goal. We have already witnessed the work of irregulars in this field, who have taken advantage of the demands and the aspirations of victims and their families. It is well, then, for us to consider our roles in respect to the handicap, unmixed with pride or prejudice, to give of ourselves and our time in their service, and to do so humbly, without the promise or the expectation of miracle.

It may well be said that the problems of the cerebral palsy victim vary widely from one case to another. The prognosis is rather difficult to determine. The program of treatment requires long years of training and utilizes many of the techniques of the occupational, physical and speech therapists, subjecting such a program to the prescription and constant supervision of physicians who are familiar with the problems of cerebral palsy and are willing to combine the general medical, neuropsychiatric and orthopedic points of view in the final over-all evaluation of the child and that child's response to the program. No specific therapies are available. The various proposed drugs are worthy of further study and trial. The various surgical, bracing and training techniques find indication in individual cases. Training must be adequate, prolonged, and in keeping with the needs and possibilities of each individual for participation in the varied aspects of community life.

EXCHANGE TRANSFUSION FOR ERYTHROBLASTOSIS FETALIS

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TERRE HAUTE

While our understanding of the factors involved in erythroblastosis fetalis is now past the groping stage and the theoretical concept is on a firm basis, serologically, the practical clinical aspects are comparatively new and still in a stage where such cases should be reported, even though perhaps incomplete in scientific work-up. Of course, the more complete the data, the more illuminating is the case report. Much of the data can be obtained by any medical practitioner and prenatal blood samples can be sent to central laboratories for the essential technical report. The chief difficulty encountered in this case lay in finding a suitable donor.

CASE REPORT

The infant, a girl, weighing 6 lbs. 5 oz., was born at the Union Hospital at 2:30 A.M., February 9, 1947, the second child in her family. The first child is a normal boy. The patient's birth was normal, being entirely spontaneous, with a small episiotomy. She cried, after a little coaxing, and seemed normal, except that she looked a bit pale in the artificial light. Seen later, at 10 A.M., she was obviously jaundiced, and tests immediately run showed red count 5,050,000, hemoglobin 98%, leukocytes 26,200, myelocytes 3, metamyelocytes 7, band forms 45, neutrophils 31, eosinophils 2, basophils 1, lymphocytes 9, monocytes 2, normoblasts 10 per 100 Rbc, blood group A, Rh-positive. The mother was Rh-negative. A diagnosis of erythroblastosis fetalis was made.

Search for a donor was begun, and it was not until 10:00 P. M., February 9, that the transfusion could be started. A man who was group A, Rh-negative was used. (The donor had never, himself, received a transfusion.) The baby was given an exchange transfusion, following A. S. Wiener's

technique[1, 2], and using the left internal saphenous vein and left radial artery. After 100 cc. of citrated blood had run into the ankle vein, the radial artery was bared and nicked longitudinally and allowed to bleed into a graduate. Heparin 0.2 cc. (220 units) was then injected into the transfusion tubing. This very soon freshened the bleeding. Later, as the bleeding slackened, heparin was injected again for a total of three doses of 0.2 cc. each, the last dose being given when 250 cc. of blood had run in. The arterial bleeding continued at about the same rate as the intake of blood, and when a little over 400 cc. had been bled, the bleeding was stopped by compression.

The transfusion was continued until 525 cc. had run in. Bleeding from both incisions was controlled by compression and one silk stitch was used in the skin of each. Neither artery nor vein was ligated. Both wounds healed by first intention, and circulation in the baby's hand has remained unimpaired.

The procedure went forward nicely, requiring about two hours, and the patient stood it exceedingly well; in fact, she was obviously improved before the transfusion was finished. The cannula used for the vein was a 20-gauge needle with the point cut off. No attempt was made to intubate the artery, as it was simpler to catch the blood in a graduated liter container, and in addition there was no risk of injuring the intima of that vessel.

The transfusion was completed before the baby was 22 hours old. During the next three days she ran a fever, reaching a maximum of 103.4, rectally. At the same time, she was rather listless, but by the seventh day had improved markedly. She was never given a breast feeding, but was fed a formula of evaporated milk, water and dextri-maltose. The jaundice remained deep for five days, then became preceptibly lighter each day, being merely a tint at the time she went home, at the age of ten days. On discharge from the hospital, she weighed 6 lbs. 9 oz. Two days later, her skin looked normal and she was reacting to food and other stimuli like a normal infant. On February 26 her blood count showed Hb. 14 gm. per 100 cc., Rbc 4,380,000 and her weight was 7 lbs. Color and general appearance normal.

The data in this case are shown below in tabular form:

BLOOD TYPES

Mother	Rh-negative		(Wiener rh.)
Patient	Rh-positive	(Group A)	(Wiener ARh$_o$.)
Donor	Rh-negative	(Group A)	(Wiener Arh.)

TESTS FOR RH ANTIBODIES

	Agglutination	Blocking	Conglutination
Mother	positive 1:2	positive 1:32	positive 1:4
Patient	negative	positive 1:4	

PATIENT'S BLOOD COUNTS

Date	Hb. in gms.	Red Cells	Leukocytes	Normoblasts per 100 Rbc.
2- 9-47	14.9	5,050,000	26,200	10
2-11	17.2	6,080,000	22,600	1
2-12	18.1	6,300,000	26,150	
2-15	16.9	5,680,000	33,250	1
2-19	15.9	6,080,000	14,850	none
2-26	14.0	4,380,000	11,000	none

While the data above given are not as complete as might be desired (for instance, it would be well to have the blood type of father and brother), still, there is enough information to make the diagnosis and to satisfy the theory. The tests were all done in the laboratories of the Union Hospital and of the Associated Physicians and Surgeons, in a city of less than 100,000 population. In other words, such work can be done in any well-supervised laboratory. It has become apparent, however, that registries for Rh-negative donors must be established. While washed red cells from the mother can be used in case of necessity, it adds another technical step, and often the mother may not be able to spare the blood herself.

SUMMARY

A case is reported showing typical clinical and laboratory findings of erythroblastosis fetalis on the day of birth. It exemplifies the theoretical tenets of serology, in that the mother is Rh-negative with a definite titer of Rh antibodies, the patient Rh-positive, and also possessing Rh antibodies. Gratifying results were obtained by exchange transfusion, whereby about 90 per cent of the patient's blood is replaced by non-toxic Rh-negative blood. This procedure can be performed with simple apparatus and limited personnel—in this case, two doctors, one nurse, and the clinical pathologist.

Acknowledgement is here made of the invaluable association and assistance in this case of Dr. S. C. Bradley, pediatrician, and Dr. L. L. Blum, pathologist and director of laboratories, who performed the special tests, attended the transfusion, and made valuable suggestions regarding the work-up.

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Terre Haute, Indiana.

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A SECOND REPORT ON INTRATHECAL PENICILLIN IN CENTRAL NERVOUS SYSTEM SYPHILIS

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George W. Bowman, M.D.***
INDIANAPOLIS

THIS work was begun in August, 1944, and the first report was published in The Journal of the Indiana State Medical Association, July, 1945. At this time we had seventy cases under treatment with intrathecal penicillin, twenty-five cases at the Indiana University Hospital and Medical Center, and forty-five cases at the Indianapolis General Hospital. The results obtained justified a continuation of this work. At the present time there are one hundred and eighty-five cases at the University Hospital and Medical Center, and two hundred and thirty-six cases treated at the Indianapolis General Hospital. All of these cases have been under treatment with intrathecal penicillin. In addition, certain selected cases were given intramuscular penicillin, or malaria, or both, depending on the evaluation of the case.

Intrathecal penicillin alone is not the answer to central nervous system syphilis, any more than malaria or intramuscular penicillin alone. We have, however, been able to accomplish some results with intrathecal penicillin that could not have been done with malaria or intramuscular penicillin, or both; and we have been able to augment the favorable results of malaria and intramuscular penicillin. The reaction to intrathecal penicillin properly given is about the same as that following the routine lumbar puncture. A few have mild reactions and occasionally a reaction is classified as moderately severe. All reactions are transitory. These reactions are much less than those following Swift-Ellis treatments. The danger is far, far less than with malaria.

The average intrathecal dose is 20,000 units and the average time between treatments is one week. The initial intrathecal treatment should be small, that is, 5,000 units, and the amount gradually increased to 20,000 units. This is important in all acute central nervous system syphilis and it applies especially to acute paresis and acute meningovascular syphilis. Large doses in these acute cases will be followed by severe reactions. Some old, chronic cases will do better if the treatments are given at two to four week intervals.

There is a trick in the proper way to give these intrathecal treatments. The glass adapter is inserted into the spinal needle and the spinal fluid is allowed to flow down the small rubber tube into the elongated covered glass cylinder. As soon as the spinal fluid appears in the glass cylinder, introduce the required amount of penicillin (dissolved in normal saline solution) and allow the spinal fluid to continue to flow into the lowered glass cylinder and mix thoroughly with the penicillin. Continue until the cylinder is well filled with spinal fluid mixture or the patient begins to have a frontal headache. Thirty-five to forty-five cc. of spinal fluid can be withdrawn. Now elevate the cylinder and allow to flow back. When cylinder is about half empty add sterile normal saline solution equal to the amount of spinal fluid withdrawn for the test before glass adapter was inserted into spinal needle. This maintains the original volume of patient's spinal fluid. By the above method the penicillin spinal fluid mixture can be introduced high up and into the skull. This gives better results in paresis and meningovascular syphilis. In Tabes dorsalis it is not necessary to introduce the penicillin up so high.

Intrathecal treatments should be given only in hospitals or large clinics where proper equipment and trained personnel are available.

Clinical improvement begins early. Serological improvement follows much later, and in the average case begins after ten to fourteen treatments. The clinical improvement holds surprisingly well. A similar situation prevails after successful malaria treatment. Acute early paresis and late paresis have responded well to intrathecal penicillin. Some paretics who were malaria failures have responded to intrathecal penicillin. Some paretics in whom the disease has again become active after a remission of three to four years following malaria, and in whom varying degrees of dementia were present, responded to intrathecal penicillin. Paralysis in meningovascular syphilis have responded better to intrathecal penicillin than to any other treatment.

It will take a period of years of follow-up on these cases to be sure, but the outlook at present is very hopeful.

Cases in which malaria is contraindicated because of age or physical condition can usually be controlled by intrathecal plus intramuscular penicillin. Central nervous system cases with severe aortic valvular lesions may be treated with intrathecal and intramuscular penicillin.

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The criteria and codes for analysis and tables of results follow:

SPINAL FLUID CODE

Cell Count	*Protein*
(1) Normal—(0 to 5)	(1) Normal—(0-30) mgms.
(2) Borderline—(6 - 10)	(2) Mild—(31-50) mgms.
(3) Abnormal—(11 and up)	(3) Moderate—(51-100) mgms.
	(4) Severe—(100 and over) mgms.

Gold Curve		*Pandy*
(1) Normal	—0000000000	
(2) Non Specific	—1100000000	(1) Negative—
(Indeterminate)	—0112100000	(2) Doubtful—Trace
	—2222100000	(3) Positive—
(3) Paretic	—5555432100	1+ or 2+
(first zone)	—(or 4's left)	
(4) Luetic	—0124554100	

Spinal Wassermann—Improvement Code

Grade 0—All dilutions 4+ or no change.
.1—4+.
.2—4+.
.3—4+.
.4—4+.
.5—4+.
Grade 1—One dilution changes toward negative.
Grade 2—Two dilutions change toward negative.
Grade 3—Three dilutions change toward negative.
Grade 4—Four dilutions change toward negative.
Grade 5—Test becomes flat negative.

Wassermann Spinal—Post-Treatment Results

		0	1	2	3	4	5
—10	(91)	11.0	7.7	5.6	15.4	6.6	9.8%
	(44.1% no post-treatment observation)						
+11	(88)	22.7	13.5	14.7	26.1	18.0	5.0%
Total	(179)	16.8	10.6	10.0	20.7	12.3	7.3%
	(22.3% no post-treatment observation)						

The above table is based on the percentage results according to the Improvement Spinal Wassermann Code which precedes.

The following criteria were used on the over-all cerebrospinal picture and the clinical findings in evaluating the results.

Cerebrospinal Fluid—Improvement Code

Grade 00—Worse one or more items—Spinal Fluid.
0—No Change.
1—Drop in cells or protein.
2—Drop both cells and protein (Slight Improvement).
3—Drop cells, protein, Wassermann, Quantitative or Gold.
4—Drop all four items fluid (Marked Improvement).

Near Normal—5 to 10 cells, protein 30 - 40 mgms, gold —1111000000.

Normal—cells 4 or below, protein 10 - 30 mgms, gold —1110000000 or flat.

(DT—Dattner-Thomas inactive formula)—Cells 4 or less, protein 30 mgms. or less regardless of Wassermann and gold curve, persisting six months or more.

Clinical Improvement Code

1. Worse—Depression, deterioration, persistent increase in any symptom or sign.
2. No Change—Stationary, no significant change.
3. Slight—Improvement of any two of the following (a) sensorium, (b) stance and gait, (c) speech tremor, writing, co-ordination, (d) pains, paresthesias, crises, vision.
4. Moderate—Improvement up to 50% but not able to work "full time."
5. Marked—50 to 100% improvement, able to work.

The following results are in percentages and are expressed in the amount of treatments received, the year given and their status at last observation:

Clinical Improvement—Percentage Cases

	1944		1945		1946	
	—10	11+	—10	11+	—10	11+
Worse						
No Change			21.5%	5.7%	10.8%	
Slight	66.6%	31.3%	64.5%	16.6%	56.7%	44.4%
Moderate	33.3%	31.3%	14.0%	33.3%	23.2%	29.6%
Marked		37.4%		44.4%	9.3%	26.0%

The two following tables show the over-all status, the amount of treatment and the type of central nervous system syphilis with the results expressed in percentages:

Clinical Improvement—10 and Under

	Worse	Static	Slight	Moderate	Marked	
Asymp.		6.5%	64.5%	29.0%		(31)
Congenital			50.0%	50.0%		(2)
Tabetic		18.1%	36.3%	18.1%	23.5%	(11)
Op. Atrophy			66.7%	33.3%		(6)
Paretic		16.6%	64.0%	13.9%	5.5%	(36)
Meningeal			25.0%	25.0%	50.0%	(4)
Total		12.2%	58.2%	22.0%	7.6%	(91)

Clinical Improvement—11 and Over

	Worse	Static	Slight	Moderate	Marked	
Asymp.			46.4%	35.7%	7.9%	(28)
Congenital						
Tabetic			16.7%	33.3%	50.0%	(12)
Op. Atrophy			66.2%	33.4%		(3)
Paretic		2.6%	35.9%	25.6%	35.9%	(39)
Meningeal			16.7%	33.3%	50.0%	(6)
Total		1.4%	36.1%	30.7%	31.8%	(88)

The following is a resume of the foregoing tables:

Clinical Improvement

	Worse	Static	Slight	Moderate	Marked	
—10		12.2%	58.2%	22.0%	7.6%	(91)
+11		1.4%	36.1%	30.7%	31.8%	(88)

Clinical Improvement

Diagnosis	Worse	Static	Slight	Moderate	Marked	
Asymp.		3.4%	55.9%	32.2%	8.5%	(59)
Congenital			50.0%		50.0%	(2)
Tabetic		8.9%	26.0%	26.0%	39.1%	(23)
Op. Atrophy			66.7%	33.3%		(9)
Paretic		9.4%	49.3%	20.0%	21.3%	(75)
Meningeal		14.3%	39.3%	27.3%	45.5%	(11)
Total		6.8%	47.5%	26.2%	19.5%	(179)

91 received 10 or less treatments.
88 received 11 or more treatments.

SUMMARY

(1) Intrathecal penicillin has given better results than intramuscular penicillin.

(2) Intrathecal plus intramuscular penicillin is better than intrathecal alone, and

(3) Intrathecal penicillin plus intramuscular penicillin plus malaria is *best*. This combination has given the best results to date in our experience.

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THE JOURNAL'S PLATFORM

1. **Preservation of American Medicine through voluntary service to the sick.**
2. **Advocating full-time county health officers, locally appointed.**
3. **Restoration and preservation of our natural waters and resources.**
4. **Maintain the present high standard of the Indiana University Medical Center, combining the full medical course in Indianapolis.**
5. **Elimination of diphtheria and smallpox through immunization and vaccination.**
6. **Support of the state-wide campaign against undulant fever.**

Editorials

DOCTOR FORSTER LEAVING INDIANA

THIS announcement will be received with much regret by the hundreds and hundreds of Indiana medical folk who have come to know this estimable chap. He came to Lake County a bit more than two decades ago and at once became active in medical organization. As a matter of fact, he had been a member of the local society only about four years when he was named as its executive head. From that time on his rise, both locally and in state association affairs, was rapid; he was named to association committees, to which he brought many valuable suggestions, and a short time later became a member of the Council, in which capacity he served several years. A bit later he was named as President-Elect and upon assuming the major office he brought many worth-while innovations into our organization.

Still later he was named as Associate Editor of THE JOURNAL and it was here that he probably did his best work. He teamed up with the Managing Editor and the Editor in good style and soon we came to depend on him, no end. Later he was named to fill a vacancy in the alternate delegate list to the A.M.A. House of Delegates, and at Atlantic City, last year, made many friends. Forster has been a hard worker, though he managed to get in an occasional vacation, most of which were enjoyed in the West. We long have known that he has been "flirting" with the idea that some day he would make that area his home, but for some years have succeeded in delaying his decision. He goes to California, to a small community near San Diego, and present plans are that he will take things a bit easy, doing some work in dermatology.

We wish Nes and Ethel the best of everything—both darned good kids, and deserving of a long vacational rest!

JOURNAL COSTS

JUST in case you did not know, we will tell you that it costs real money to get out such a magazine as you receive every month—in fact, in the past seven years these costs have increased a little matter of *300 per cent* or so—some increase, that! We are printing a little table covering such matters from 1941 to the present time.

PRINTING COSTS PER YEAR FOR 1941 INCLUSIVE 1947

Year	*Total Cost*	*No. Pages*
1941	$7,092.83	1234
1942	8,410.89	1240
1943	9,515.47	1252
1944	10,682.64	1346
1945	12,042.36	1288
1946	21,283.49	1476
1947	24,790.34	1462

Many factors are responsible for these increases, chief of which, of course, is labor costs. Then, too, our paper bills have grown to enormous proportions these last few years. There is just nothing we can do about it, save to "pay the freight."

In conversation with the sales manager of one of the largest printing companies in the country, he saw several copies of our magazine on our desk. He remarked that this was one of the best printing jobs—for magazines—he ever had seen. When I told him the cost per page he just whistled and remarked, "Why, we could not do that for that price—we would have to charge you at least 30 per cent more than that." He asked about delays in getting the magazine out and when we told him there always was some delay he remarked that he knew of several magazines that were delayed from two to four weeks.

So, after all, we may feel ourselves fortunate in having a good printer, getting good paper stock and putting out a presentable example of the better printer's art—even though it is costing us real money.

"THE SHADES"

PRESS reports are to the effect that after much delay the sale of "The Shades" properties to private interests has fallen through and that this beautiful spot soon will become a part of the Indiana State Park System. To us, this is unusually good news for we have been acquainted with this natural beauty spot for several decades. As a young man we used to join parties to spend the day there, never ceasing to explore some hitherto unvisited spot.

To us, born in the country as we were, the trees apparently made the greatest impression on us, particularly the giant white oaks, now rapidly disappearing from Hoosier countrysides. We always have liked trees of all sorts, from the lowliest of the shrub stock on up, but somehow the white oak was a favorite. Other oaks may have had their appeal, but the white oak was "tops" with us. We had a lot of them in the Wild Cat neighborhood when we were a lad, but most of them have disappeared from the territory, gone to make staves for barrels for a particular commodity.

And this timber in the Shades area is of the virgin sort, never has been cut over. Few such spots remain in Indiana, or anywhere else, for that matter. A few years back there was such a timber tract down near Paoli and when the announcement was made that it was to be sold and cut up for commercial purposes a great hue and cry arose and public-spirited citizens took over the tract.

A long time ago some one wrote, "Only God can make a tree," which is very true and the making thereof takes a long time, often centuries. We can reforest, it is true, but many generations will come and go before the results are apparent. We have in our back yard, for example, a black walnut, the nut having been planted in the spring of 1931. It is a thriving tree, bears plenty of nuts and all that, but it will be years before that tree has a real commercial value.

The Shades are near Turkey Run State Park, one of Indiana's most famous spots, being but seven miles away. It will require but little to connect these two beauty spots, making an extensive area for recreation and sight-seeing purposes for succeeding generations. Arthur Baxter, of Indianapolis, bought the tract when it seemed certain it was to be sold elsewhere and gave the state a long lease on the property. Funds for the final purchase now seem available and it will not be long until another Indiana historic spot belongs to the people.

The Hoosier state park system, by the way, is no small affair. It is said to be second only to the state of New York in that regard. So, again do we doff our hats to the memory of Richard Lieber, the father of our state park system, and wish that he might visit some of his handiwork as it exists today.

THE ALEMBERT W. BRAYTON FOUNDATION

SOON after we entered medical school at Indianapolis, now almost a half century ago, we were especially attracted by one of our teachers, Doctor Brayton. We were not especially interested in the subject of dermatology but after a few morning visits to the "Bobbs Free Dispensary," then situated in the old medical school, Market Street and Senate Avenue, we recognized the genius of this man, both as a teacher-clinician and as a literary man of rare abilities.

Doctor Brayton's career, both as a youth and later as a student in many institutions, has a mighty Alger-esque tinge; his desire for knowledge was insatiable and few men we have known through the long years was such a universal student as he. In his clinics, in addition to incon-

trovertible proof that he was very familiar with his specialty, he constantly interjected comment on some literature—perhaps current and more likely than not some one of the classics. He constantly urged his students to "learn to read—and read wisely."

So it is that we are more than delighted to learn that his memory is to be kept green in medical circles, that a Foundation is to be established in his honor—few men we have known in a rather long connection with Medicine are as deserving as he.

One hardly knows in what particular field Doctor Brayton excelled; as we have remarked, he knew dermatology, he knew all the best authors of present and past generations. He was an excellent speaker and a writer with ability possessed by but few men in the profession. He belonged to many literary organizations—taking an active part in all of them.

Our memory seems to stress his medical magazine—*The Indianapolis Medical Journal*, later called *The Indiana Medical Journal*. Doctor Brayton very frequently referred to this magazine, his favorite name for it being the "E. J.," meaning the Educational Journal. Many of its pages were from his own pen—we know of no medical publication of today that contains so much of the personal writing of its editor.

Doctor Brayton liked nothing better than to "get hold of a tough case," as he often expressed it. We recall that one morning he spent at least a half hour describing a case of scabies that baffled him; try as he might he could not locate the source. The patient was a western cattleman of means, who had been "all over," trying to get relief from his trouble; finally he came to Doctor Brayton and remained in Indianapolis for some time.

One morning Doctor Brayton came into Bobbs with an unusually wide grin on his face; he remarked "Gentlemen, I have discovered the mite that is causing my famed patient so much trouble." It seems that he had ordered the man to appear at his office one morning, in the meantime having an entire new wardrobe ready for him. "I stripped him to the pelt," remarked the clinician, "putting all his worn clothing in bags. Then I personally scrubbed him from head to foot, using my magnifying glass all the while." This magnifying glass, by the way, was his constant companion. Then he took the man's clothing, garment by garment, and subjected it to a minute study. Finally he found the mites—they were located in the trouser seams! The man's new raiment was given a generous dusting with powdered sulphur and he returned to his western home, no longer troubled with itching.

Another outstanding memory was his handling of a case of syphilis. The patient had every symptom, copper colored spots over the skin, a red throat and all that—this of course was before the days of the Wassermann and the arsenicals. Diagnoses were made via other means—in the case of Doctor Brayton we always felt it was made by personal observation of cases through a long period of years.

He finally located the chancre on the lower lip of the patient. Picking up a fifteen-gram tablet of bichloride of mercury, he rubbed the full amount into the open sore.

Stepping over to the washbasin, he washed his hands, dried them on a paper towel, turned to his class with the remark, "Gentlemen, I have enough syphilis under the fingernails to infect the whole damned city—Good Morning!"

Such are but two of the numerous incidents in our memory of this great student, this great clinician—they show two sides of the man—and he was a man of many "sides."

We are proud to know that after all these years his name is to go down with the long list of Great Men in Hoosier Medicine!

Editorial Notes

A recent survey shows that physicians still head the mortality list in the matter of heart disease, including the arterial system, but are well down in the list of cancer mortality. The answer, of course, is that physicians are under a greater strain, both mental and physical, all of which gives an added strain to the heart. The average physician is well aware of the pre-cancer symptoms and thus is able to take proper precautions.

We continue to talk about the cost of good health—that is, most of the talking is done by a group that would like to take over the health supervision of the entire nation. These folk prate about the costs of keeping well, the costs of preventive medicine, right here in Indiana. As a matter of fact, our total annual health expenditure—by state organizations, we mean, is far below that of many states. Some five years ago we spent but thirty cents per capita in this work, while the average in all states was sixty-one cents; in our neighboring Michigan the amount was hiked to sixty-eight cents.

This was based on figures for 1943; since that time Indiana has gone a long way. We have had additional legislation, we have had a more complete reorganization of the Indiana State Board of Health—we are spending *real money* in an endeavor to catch up with other states.

But we still have a long way to go; we still must surmount many impediments placed in our path. However, at the rate we are now progressing we believe that the Hoosier State soon will take its proper place in the list of progressive states in matters pertaining to the health of its people.

So, according to press reports, our own Tommy Hendricks wants to "glamorize" the General Practitioner! The "interim session" of the American Medical Association was the starting point in this program, since most of the program for that meeting was devoted to this subject. Well, it seems that it took a long time for the Brass Hats to wake up to the fact that the General Practitioners, after all, are the real Grass Roots of the medical profession; they are the ones who best know all the answers and it indeed is high time that they are being accorded recognition long due them.

Dr. Wemple Dodds, secretary of the Montgomery County Medical Society, is quoted in the press as having taken exception to an article published in a recent number of *The Journal of the American Medical Association* relative to the apparent cure of a case of undulant fever by a combination of streptomycin and sulfadiazine.

If such a treatment is found effective then we shall have conquered one of the first four health menaces—but, the fact that *one* case has been reported does not mean that we have found the final solution to the problem. Like Doctor Dodds, we are a bit more surprised that J.A.M.A. would publish such an important "story," based on the finding in just one case! Through several decades in the practice of the healing arts we long ago learned that the old adage about "one swallow" is very true—especially so in medicine.

We trust that the report will lead to further study and that in due time we shall have a definite remedy for this ever-increasing disease, but until that day comes we shall continue to join with Doctor Dodds in his protest.

On December 30 Dr. L. A. Ensminger, Indianapolis, retired as Chief Surgeon for the New York Central Railroad in the Indianapolis area. For more than forty years he had been associated with the system, dating way back when it was known as the Big Four. Dr. Ford was then Chief Surgeon and we recall, back in our student days, when Dr. Ensminger, then a student, first became connected with Dr. Ford. He was named to the head post in 1919. His father was one of the pioneer Indiana surgeons, being located in Crawfordsville.

Lord help the Conservatives—if any—in the 1949 General Assembly of the State of Indiana! If the present wave of "prosperity" (some call it inflation) continues, the State of Indiana will have to build itself a Fort Knox in order to care for the cash balance now looming ahead.

We got a report from the Gross Income Tax Division to the effect that if this thing keeps up this branch of State Government will, in 1948, collect something like *seventy million dollars.* In addition to all this the state treasury, in the general fund, has several million dollars salted away. Then we have the cigarette tax, which brings in a sizeable sum every month, not forgetting the yearly tax collection to which we have become inured since 1816.

All this piles up to a whale of a lot of money, as we used to say down in Wild Cat. The sum total is so great that even our best mathematicians have not as yet been able to figure it all out. But the fact remains that the Indiana cash balance in 1949 is to be stupendous.

It is, of course, but natural to suspect that among the 150 legislators there will be some who want to go on a spending spree and it will require much effort to stop them. There are many spots where a judicious, well-considered spending program will meet with general approval. Our state hospitals, our educational institutions, among others, will need many millions of dollars to bring them up to the highest standards.

There also is much talk of a state office building, which seems to meet with general approval. As it is now, many state departments are occupying rental space, scattered over the Capital City, which might well be brought into a centralized, state-owned area.

But as we have said, it is a big problem, one that will bring about many a headache and our only hope is that we may have enough conservatism in the 1949 General Assembly to do the thing that is best for Indiana.

Occasionally some "big town" newspaper publishes a story of the human interest variety, sometimes including a story of the daily life of a "country doctor," as he used to be called, now recognized by the more dignified term, General Practitioner. In a recent number of the magazine section of the *Indianapolis Star* there was such an article, with Dr. J. E. Ferrell, a recent President of the Indiana State Medical Association, as its "hero."

The article was indeed well written, depicting the daily life of a busy professional man, one who seemed always to find time to do the various things demanded of him. It speaks of the long hours, both in making calls and at his office in the small community of Fortville, where he has been located for more than two decades—prior to that time he was in another smaller, adjacent community.

The article speaks of the time that finally came when Dr. Ferrell had to call it "quits" when midnight came—no longer was he able to continue on a twenty-four hour schedule.

Such items as these are of the greatest benefit to Medicine, coming as they do at a time when efforts are being made to destroy our very foundations.

President's Page

ACCESSORY MEDICAL ORGANIZATIONS

FREQUENTLY members of our association are being urged to join other medical organizations for the express purpose of having that organization solve the many politico-economic problems which the medical profession faces. I have frequently been asked my opinion as to whether there is a need for such organizations, and the following statements are my own personal opinions. I have no quarrel with any physician who holds a different view.

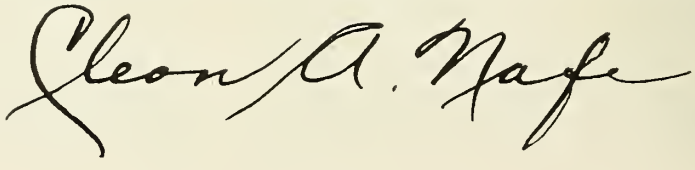
The only medical organizations that can solve the many social, political and economic problems of medical care are the American Medical Association and its constituent state and county medical societies. These are the only organizations in which most of the physicians hold memberships and, therefore, are the only ones that can speak authoritatively for the medical profession on the national, state and county levels. These are the organizations that should be strengthened and stimulated to do a better job. Like many physicians, I belong to several other medical organizations, but their functions are mainly those of furthering education in my particular specialty. I doubt if even all of these special societies are necessary.

It was true a few years ago that many physicians felt that the A.M.A. was not as aggressive as it should be in activities other than the advancement of medical science. There was a feeling that the medical profession should take a more active part in political, social and economic problems that are related to the practice of medicine. For that reason the National Physicians Committee, the Association of American Physicians and Surgeons, and several other less prominent medical groups were formed for the purpose of trying to solve some of these problems in several different ways. Most of the physicians who are active in these organizations have a sincere motive, yet sometimes they are wrong in their approach, and they cannot speak for any large segment of medicine. Of how much value these organizations are to the medical profession is debatable. Undoubtedly, they have stimulated the A.M.A. and state medical associations to do a better job and to become more active in a field of endeavor that they have neglected. I have always believed that most of the functions that these organizations assumed are the proper functions of the A.M.A. and its constituent societies. I have used all of my efforts to urge that the A.M.A. assume these functions and that our state and county societies follow through with an adequate program.

A rather large representation of our state medical association attended the recent midwinter meetings of the A.M.A. in Cleveland. I believe that it was evident to all present that the leaders of medicine throughout the United States are fully aware of the necessity for wise action by the medical profession, and are striving to supply the necessary leadership. This was the midwinter meeting of the House of Delegates. Many other important meetings were held. On Sunday the Council of Medical Service of the A.M.A. sponsored a regional meeting for the purpose of discussing with leaders of state associations many of the medical care problems, and especially the problems of better medical public relations. I was very much impressed by this meeting and hope that in some way every physician can participate in such discussions on a state and county level.

The American Medical Association has increased its activities many-fold in the last several years. This has come about because of the demands of physicians through their regularly elected representatives. Public relations counsel has been employed. Voluntary nonprofit prepayment medical and hospital care plans are being promoted and encouraged. The Committee on Rural Medical Service is cooperating with farm groups in an effort to solve the rural health problem satisfactorily. Constructive health legislation is being sponsored, and a legislative office has been established in Washington, D. C. Likewise, state medical associations are expending more effort in these and many other activities in the interest of better medical care. They are making every effort to defeat unwise legislation.

There can be no doubt but that organized medicine has a challenging responsibility in its endeavor to furnish adequate medical care to all of the people of our United States, in such a way that they are satisfied with that service, and in such a way that the cost can be satisfactorily distributed. I believe that the A.M.A. and its constituent medical societies are the best channels through which organized medicine can do its part in discharging its responsibilities in this undertaking. A multiplicity of organizations devoted to the same task lessens the effectiveness of each and, in my judgment, is not the proper method of approach.



SECRETARIES' CONFERENCE PROGRAM

Riley Room, Claypool Hotel
Indianapolis
SUNDAY, FEBRUARY 15, 1948

While this annual meeting is called the Secretaries' Conference, all members of the Indiana State Medical Association are invited to attend it. The subjects under discussion will be of interest to all physicians.

Congressman Forest A. Harness of Kokomo, who will speak at the luncheon, heads a House Committee which probed the propaganda activities of federal payrollers supporting national health insurance, or what is commonly referred to as socialized medicine. Congressman Harness has a very revealing story to tell, something which every physician should hear. Tickets for the luncheon are $2.75, including tip. Luncheon reservations should be made through headquarters office, 1021 Hume Mansur Building, Indianapolis 4, Indiana, not later than Saturday, February 15.

The program for the conference follows:

9:30 a.m. Registration.

10:00 a.m. Opening remarks, by A. M. MITCHELL, M.D., Terre Haute, chairman.

10:05 a.m. Address of Welcome, by A. P. HAUSS, M.D., New Albany, president-elect, Indiana State Medical Association.

10:15 a.m. Report on meeting of American Medical Association House of Delegates, by HOMER G. HAMER, M.D., Indianapolis, a delegate from Indiana State Medical Association.

10:30 a.m. *"Medical Legislation,"* by NORMAN M. BEATTY, M.D., Indianapolis, co-chairman of Committee on Public Policy and Legislation, Indiana State Medical Association.

10:45 a.m. *"Home Town Medical Care of Veterans,"* by CHARLES F. THOMPSON, M.D., Indianapolis, chairman of the Committee on Veterans Affairs and Rehabilitation of the Indiana State Medical Association.

11:00 a.m. *"The Cancer Program and the County Medical Society,"* by KENNETH L. OLSON, M.D., South Bend, secretary, St. Joseph County Medical Society.

11:30 a.m. *"The World Medical Association,"* by E. L. HENDERSON, M.D., Louisville, Ky., chairman of Board of Trustees, American Medical Association.

12:00 noon Luncheon.
Speakers: CLEON A. NAFE, M.D., Indianapolis, President, Indiana State Medical Association.

HONORABLE FOREST A. HARNESS, Kokomo, Congressman from the Fifth Indiana District.

1:30 p.m. *"What the County Medical Society Can Do To Improve Medicine's Public Relations,"* by HERMAN T. COMBS, M.D., Evansville, former secretary of the Vanderburgh County Medical Society.

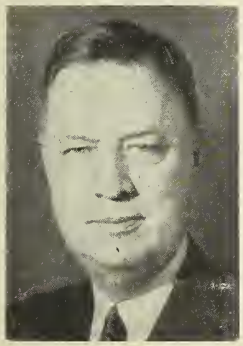
2:00 p.m. *"The Program of the Council on National Emergency Medical Service of the American Medical Association,"* by RICHARD L. MEILING, M.D., Columbus, Ohio, secretary, Council on National Emergency Medical Service, American Medical Association.

2:30 p.m. *"Do's and Don'ts for County Medical Society Secretaries,"* by O. E. WILSON, M.D., Elkhart, former secretary of the Elkhart County Medical Society.

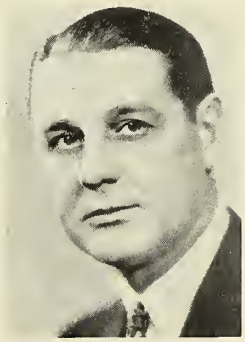
3:00 p.m. *"Your Headquarters Office,"* by RAY E. SMITH, Indianapolis, Executive Secretary, Indiana State Medical Association.

3:15 p.m. Question and Answer Forum.

4:00 p.m. Election of chairman for 1948.
Adjournment.



Dr. E. L. Henderson
Louisville, Kentucky



Congressman
Forest A. Harness
Kokomo, Indiana



Dr. Richard L. Meiling
Columbus, Ohio

A.M.A. COMMITTEE TO STUDY PRACTICE OF MEDICINE BY HOSPITALS; FELLOW DUES AND J.A.M.A. SUBSCRIPTION INCREASED TO TWELVE DOLLARS

A. S. Giordano, M.D.*

SOUTH BEND

APPOINTMENT by the Board of Trustees of a special standing committee to study the growing tendency among hospitals to engage in the practice of medicine was authorized by the House of Delegates of the American Medical Association at the interim session held in Cleveland in January. The establishment of this committee is a result of the introduction of more than seventy resolutions in the House in recent years in protest against hospitals making a profit on the services of radiologists, pathologists, anesthesiologists, et cetera. The practice was bitterly assailed when considered by the reference committee. The study committee will report to the House, probably at the annual session at Chicago next June, and from its findings it is hoped that a solution of the problem will emerge.

The Utah State Medical Association went so far as to suggest in a resolution it introduced in the House that the Council on Medical Education and Hospitals "refused to approve for training of residents and interns of any hospital exploiting professional medical services."

While the hospital-in-the-practice-of-medicine issue was unquestionably the highlight of the meeting, House action in increasing dues of Fellows from $8.00 a year to $12.00, and the subscription price of *The Journal of the A.M.A.* from $8.00 to $12.00 a year, is of particular interest. Both increases become effective for the current year. As he recommended to the delegates that the increases be voted, Dr. E. L. Henderson, chairman of the Board of Trustees, revealed that in 1947 the operating costs of the American Medical Association were $170,000 in excess of income, and that labor costs alone in producing *The Journal* were four cents a page higher.

The House took action upon another topic that has been more or less of a "hot potato" at A.M.A. sessions—the supply and distribution of interns. The speaker was directed to appoint a committee of five, two of whom are to be general practitioners, to study the problem in cooperation with the Council on Medical Education and Hospitals. To be known as the Committee on Intern Placements, this committee was instructed to have its report ready for the house session in June.

Other actions by the House:

1. Corrected the by-laws so Section on Chest Diseases voted last year could be legally established.

2. Directed the Board of Trustees to make a study of use of federal funds for propaganda purposes, and if found that moneys were being misused, to make complaint to Congress.

3. Defeated a proposal to the effect that future interim sessions be held in December.

4. Approved in principle the x-raying of chests of school children and school personnel for detection of pulmonary pneumonia.

5. Recommended to U. S. health agencies that before persons are permitted to enter this country they be required to take a physical examination, including chest x-rays, to stop spread of communicable diseases.

6. Refused to vote limit of tenure of delegates on the ground that it is the prerogative of state associations to say how long their delegates shall serve.

7. Turned down proposal that trustees be elected from geographical districts.

8. Adopted a resolution commending the Harness Committee of the U. S. House of Representatives for exposing lobbying activities of federal employees.

Two Indiana delegates received reference committee appointments. Dr. Homer G. Hamer, of Indianapolis, was named to the Committee on Reports of Board of Trustees and Secretary, and Dr. F. S. Crockett, of LaFayette, was appointed to the Committee on General Medical Practice.

Doctor Crockett, as chairman of the Committee on Rural Medical Service, read his committee's report to the House and distributed a booklet on "Extension of Rural Medical Service," which is a compilation of what every state association is doing in this field. The Indiana chapter was written by Dr. H. N. Smith, of Brookville, 1947 chairman of the Committee on Rural Medical Care, and Hoosiers were proud of the excellent account by Doctor Smith.

Mr. Theodore R. Sills, whose public relations company will serve the American Medical Association as consultant, was introduced to the delegates. His nationally-known organization has offices in New York and Chicago. Also presented to the delegates was Lawrence W. Rember, who is the new assistant to Dr. George F. Lull, secretary and general manager of the A.M.A. Mr. Rember will be in charge of the public relations program of the association. He has had extensive

* Delegate from Indiana to the American Medical Association House of Delegates.

experience directing public relations, having served the Blue Cross and American National Red Cross.

DR. JACOB T. OLIPHANT HONORED

Out of more than one hundred eighty physicians who were suggested for the General Practitioner's Award, three were nominated to the House by the committee which considered their qualifications. Dr. Jacob T. Oliphant, of Farmersburg, was among the finalists. However, Dr. Archer C. Sudan, of Kremmling, Colorado, was the House's choice for "The Family Doctor of 1948." He received a gold medal. Doctor Sudan resigned a teaching position with the University of Chicago in 1926 to settle in a village of 567 population, being the only physician within a radius of eighty miles at the time. When snow closes the mountain passes, Doctor Sudan uses open bobsleds to travel from farm house to farm house to care for the sick. While the Indiana delegation is deeply disappointed because Doctor Oliphant was not chosen, it is considered a high honor for him to be one of three of 137,000 members of the American Medical Association to be recommended for the award.

"GRASS ROOTS" CONFERENCE

The National Conference of County Medical Society Officers, presided over by Dr. A. M. Mitchell, of Terre Haute, on the night of January 6, was attended by more than three hundred doctors. It was a most excellent meeting, and the program brought Doctor Mitchell and his committee many compliments. *The Cleveland Plain Dealer* said, in reporting the meeting, that "Family doctors of the American Medical Association aired their grievances against specialists, hospitals and medical schools in plain, vigorous language." This is an overstatement but, in a sense, it summed up the tenor of the meeting. Inability of general practitioners to get hospital staff appointments and patients into hospitals was the most common complaint. Doctor Crockett, Dr. Glen Ward Lee, of Richmond, and Mr. Ray E. Smith, executive secretary of the Indiana State Medical Association, were among those who participated in the discussion.

MIDWEST REGIONAL CONFERENCE

Indiana was one of six states participating in the Midwest Regional Conference held at Cleveland on January 4, under sponsorship of the Council on Medical Service. Mr. Thomas A. Hendricks, secretary emeritus of I.S.M.A., is secretary of the council, and Mr. Smith, who succeeded him when he left Indiana, was a member of the Committee on Arrangements.

The first part of the program concerned services rendered county and state medical societies and individual physicians by the A.M.A. Speakers were heads of A.M.A. departments.

Dr. R. R. Sayers, of Washington, D.C., chairman of the Medical Advisory Board, United Mine Workers of America Welfare and Retirement Fund, gave an off-the-record speech at the luncheon. Need for better preventive medicine in mining communities was stressed.

Physicians from Indiana (and more were present than from any state other than Ohio) took most interest in a discussion of modern medical public relations. Papers on this subject were presented by Mr. Lester H. Perry, executive secretary of the Medical Society of Pennsylvania; Mr. Hugh W. Brenneman, public relations counsel for the Michigan State Medical Society, and Mr. George H. Saville, director of public relations of the Ohio State Medical Association. The need for better public relations by the profession, and some of the things that should be done to achieve this end were pointed out.

Among those in attendance were Dr. J. Neill Garber, of Indianapolis, chairman of the Indiana Committee on Public Relations; Dr. Earl W. Mericle, chairman, and Dr. Harold M. Trusler, vice-chairman, of the Public Relations Committee of the Indianapolis Medical Society; Dr. J. William Wright, Dr. Bert E. Ellis, Dr. Karl R. Ruddell, Dr. Homer G. Hamer, Dr. Cleon A. Nafe, Dr. C. H. McCaskey, Mr. Smith and Mr. Joseph E. Palmer, executive secretary of the Indianapolis Medical Society, all of Indianapolis; Dr. Crockett; Dr. Mitchell; and Dr. William M. Cockrum, of Evansville.

SPECIAL EVENING SESSION

A native Hoosier, Oscar P. (Jack) Ewing, federal security administrator, presented Doctor Sudan with the General Practitioner's Medal the night of January 7. Mr. Ewing asked for the cooperation and help of organized medicine, but said that he, as an official of President Truman's administration, was "whole-heartedly prepared to go along with the President's policies on national health insurance." On non-controversial health programs Mr. Ewing said he hopes "we can work together."

Another top official in the Truman administration, Secretary of Agriculture Clinton P. Anderson, told of need for better medical facilities in rural areas, and declared that volunteer prepayment plans for surgical and medical care were inadequate. The problems discussed by Secretary Anderson were to be discussed at the third annual National Conference on Rural Health, arranged by Doctor Crockett's committee, which was held in Chicago earlier this month.

CONGRESS ON INDUSTRIAL HEALTH

Dr. R. L. Sensenich, of South Bend, president-elect of the A.M.A., participated in a round table conference on the outlook for industrial medical service at the eighth annual Congress on Industrial Health in Cleveland, January 6.

Indiana doctors in attendance were Dr. E. S. Jones, of Hammond, chairman of the Indiana Committee on Industrial Health; Dr. Louis W

Spolyer, of Indianapolis, a member of the committee; Dr. David R. Johns, of East Chicago, chairman of the Indiana State Board of Health; and Colonel Charles L. Maxwell, of Terre Haute.

PHYSICIANS PRESENT FROM INDIANA

The registration at the interim session totaled 2,588 up to 2 P. M. Wednesday, January 7. Doctors from Indiana who had registered up to that time were:

Bankoff, M. L., Michigan City
Bartlett, Robert C., Dublin
Beam, William C., Marion
Beaver, Norman E., Berne
Bibler, Lester D., Indianapolis
Bizer, Mier, Jeffersonville
Black, Edgar K., Wabash
Blazey, A. G., Washington
Booher, Norman R., Indianapolis
Cameron, Don F., Ft. Wayne
Cockrum, William M., Evansville
Conklin, Raymond, Elkhart
Covalt, Donald A., Muncie
Crockett, Franklin S., LaFayette
Dagley, Hubert R., Hope
Davis, Floyd H., Mentone
Edwards, Bernard E., South Bend
Ellis, Bert E., Indianapolis
Ettl, Edward, Cromwell
Faltin, Ladislaus, South Bend
Fipp, A. L., Rome City
Folz, Charles J., Evansville
Giordano, Alfred S., South Bend
Hall, Frank M., Indianapolis
Hamer, Homer G., Indianapolis
Jay, Arthur N., Indianapolis
Johns, David R., East Chicago
Jones, E. S., Hammond
Kahan, H. L., Gary
Lee, Glen Ward, Richmond
Maxwell, Col. Charles L., Terre Haute
McCaskey, Carl H., Indianapolis
Mishkin, Irving, Elkhart
Mitchell, Albert M., Terre Haute
Nafe, Cleon A., Indianapolis
Neukamp, Frank H., Connersville
Newcomb, William K., Royal Center
Oak, David D., La Crosse
Oak, David D., Jr., Hanna
Overesch, H. B., Jr., Lafayette
Patterson, Jack W., Fort Wayne
Peck, Franklin B., Indianapolis
Prenatt, Francis, North Madison
Ruddell, Karl R., Indianapolis
Ryan, William J., Columbus
Schuler, R. P., Kokomo
Scribner, Robert B., Marion
Sensenich, R. L., South Bend
Shields, Jack E., Brownstown
Shoup, Homer B., Greentown
Spolyar, Louis W., Indianapolis
Stroup, Tyler J., Indianapolis
Wright, J. William, Indianapolis
Woods, James R., Jr., Greenfield

PROGRESS OF MUTUAL MEDICAL INSURANCE, INC.*

WALTER U. KENNEDY, M.D.†

NEW CASTLE

THERE is a real satisfaction in reporting success, and when that success is overwhelming, one's elation and happiness in making such a report has no limits.

Mutual Medical Insurance, Inc., your company, reports that its first year of operation shows the greatest progress in membership and in finances of any similar company. Beginning with a coverage of exactly zero in the year past, we have reached a coverage of 130,000 in the surgical plan, and 10,000 in the medical plan, and we confidently count on adding an additional hundred thousand in the next year.

Financially, we began operations with a capital of $83,000, which before beginning operations was reduced to $71,000, an organizational loss of $12,000. Now, a year later, we have repaired our primary capital loss and have paid over $4,000 in interest to those doctors who advanced our capital, and have our capital intact.

We now have gross assets of $400,000, which include a reserve of over $200,000 in cash and government bonds ample for every outstanding claim against us. Our income has risen from zero to a present one of over $75,000 a month, which is now at the rate of nearly a million dollars a year and will exceed a million dollars in 1948. We have paid out nearly $500,000, half of a million dollars, and are now paying out at the rate of close to three-fourths of a million per year, and expect to pay out a million dollars in 1948. We have truly a record of achievement, in which the profession of Indiana may take pride, for this company is truly a doctor's company, organized by doctors and absolutely controlled by doctors, and we have not needed the services of non-professional men in conducting our affairs.

It is to be remembered that the stated reserves of $200,000 do not mean excessive or continuing reserves at that rate. We were protected by "pre-existing" clauses and by waiting periods against maternity and tonsil claims. We are now away from that protection and claims for these matters are amounting to at least one-third of our claims. Maternity claims alone rose from nearly zero in January to approximately $10,000 for October.

We have been concerned that the interests of our doctors be evenly considered and that there be a

* Presented at the General Meeting at the annual session of the Indiana State Medical Association at French Lick, on October 29, 1947.

† President, Mutual Medical Insurance, Inc.

real effort to pay for services rendered by general practitioners. Many doctors have felt that the benefits were unevenly distributed among professional classes. It will interest you to know that our claim payments are nearly evenly distributed between surgeons and general practitioners. There are four classes of claims which take nearly three-fourths of our outgo: Maternity, appendix operations, fractures and tonsil operations. Maternity claims alone use one-fourth, appendectomies use another fourth, tonsillectomies require over 10 per cent, and fractures account for 5 per cent, so that services most commonly done by general practitioners comprise over one-half of our claim expense. In addition to these, the purely medical claims are rising in number and in cost. We feel that until we are able to include full medical care we are doing very well by the general practitioners, who, after all, are the principal representatives of the whole medical care program. When, as we presently plan, our community campaigns can reach every section of the state, the allowance totals will go in increasing percentages to the general men.

We are not unmindful of the desires of the men doing special work in radiology, in laboratory services, and in anesthesia, to have proper recognition in our medical company program.

We are doctors, too, with doctor's viewpoints, but as trustees of an important organization we owe a basic duty to our subscribers that the business affairs be so conducted as to secure certainty of the contract payments. We must assume only the obligations which the rates charged for policies will care for. It would, of course, be possible immediately to provide for everything, but we would have to increase our rates, an undesirable action, which by setting up barriers to our progress might seriously compromise our whole undertaking. We therefore are establishing by experience what we can do and, by greatly increased membership, permitting lowering of overhead costs, expect to make possible the assumption of these special costs. As your President, I have firmly held the position that, when financially possible, we should take over these matters, and with sincerity I assure our colleagues in these special fields that there will be no avoidable delay.

To carry out our sincere beliefs, by methods we have proved to be sound, we must be certain that our efforts do not fail because of insufficient financial resources to meet every possible event, even a great depression. This organization of yours has, in its first year, held financial solvency to be a fundamental matter.

The faith and credit and reputation of the medical profession is behind the project. To have it fail because of limited financial resources is unthinkable. We have therefore, at the risk of being called illiberal, made every effort to attain a financial solidity which will make us impregnable. That condition is being approached with amazing speed. An earned surplus of over $200,000 speaks for the economy and soundness of administration.

This now permits and we now announce widening of the contract provisions to cover practically every surgical incident occurring to our members, and particularly to add those smaller but more frequent incidents and emergencies ordinarily treated by the general practitioner. When we have widened our coverage to provide for all such events, and to provide for our special professional colleagues, our next procedure will be to increase the allowances in each case, and finally to provide for every form of medical care.

Such progress is only possible to companies with ample financial backing, and that comfortable position is now assured to us.

We have in no manner attempted to make this great organization, handling great sums of money, a financial milk cow for the medical profession. Its ends and aims and ideals are the ultimate good of the people, and its development and continued support by the profession is our answer to those who, in the guise of benevolence, would, in their effort to install bureaucratic control of the methods of living, irretrievably damage the precious asset of a man and of a people, good health.

But we continue to need the loyal support of the profession, that the people of every part of Indiana may know of the profession's venture and have the same confidence in it that it has in you as individuals.

It is proper that we here advise the doctors of Indiana that such success as we have had is due to the unselfish efforts of its Board of Directors, almost completely made up of your Councilors, who have, in loyalty to the good of the profession, given freely of their time and experience, and to the Executive Committee, composed of Doctors Howard, Portteus, Crockett, Ferrell, Weyerbacher, and your President, who have carried on the active management.

We owe a meed of praise to our affiliate, the Blue Cross, which, under the able management of Mr. Guy Spring, has faithfully and efficiently carried on the duties of the enrollment in our plan, and has supplied the necessary facilities of bookkeeping. Our relations with Blue Cross have been harmonious in every respect. They have never ventured to interest themselves in our own operations, and we have religiously avoided concern in theirs, though in matters of mutual interest, free and cordial cooperation has been the unvarying rule.

But behind all of these managerial activities lies the basic and all-controlling power of the wholehearted loyalty of the doctors of Indiana. Without their support and active furtherance of our plans, we could not have grown and prospered; we could not even have come into existence. The Executive Committee of the state association clearly and succinctly epitomizes our real status, in their current report of the association, in the words, "the Medical Association has a tremendous re-

sponsibility in Mutual Medical Insurance. In the public eye, the company acts for and in behalf of the medical profession." This statement precisely explains the motives which constantly have guided and impelled the activities of your representatives, to whom the management of your company has been intrusted. We have sought to make the company primarily a plan for distributing costs of a high grade of medical care, so that even those of low income might have the same benefits frequently possible only to the high income group. Our next concern is to demonstrate that methods of private initiative and management are capable of meeting all the needs of the American people, and further demonstrating that government ought only to govern and not be concerned with the private affairs of the people, and in nation-wide efforts to arrange their lives for them. Such plans as we are conducting, and which are meeting with such general approbation and support throughout the nation, clearly demonstrate that regimentation and directed living are repugnant to the liberty-loving people of America.

We know by long observation that the Federal Government is an unwieldly organization, whose health policies are largely made up of impractical visionaries, of limited practical experience, but secure in their isolation from the reactions of ordinary experience, pompous in self-fed egotistical belief in their own omniscience, and fortified by the invariable retention of control whenever federal funds are disbursed. To permit them, because of their temporary control of directing agencies, to exploit their views is harmful to the public, in its loss of free exercise of will and desire, and particularly in the highly-specialized field of medical care, to permit them to impose their impractical policies on the people and the medical profession is to invite loss of the highest medical standards in the world, with its consequent harm to the people's welfare.

But to control and defeat these arrogant, self-accredited, would-be dictators of the nation's health policies and methods requires unceasing participation in national politics.

We vote as individuals, but our representatives in Congress and our senators finally determine whether we shall keep the system we believe in. Since the whole economic, social and professional future of every physician is directly at stake, doctors owe it to themselves and their families to support congressional candidates who are pledged to us. Our opponents do not hesitate to take group action, and in our selection of such candidates we do not use common sense and a proper conception of our obligations to the public, to our own families, to our profession or to ourselves, if we permit political beliefs on other matters to swerve us from active support of such congressional candidates who may be openly sympathetic with our views. And to support our friends in Congress and to give them proof of our capacity and willingness, we must offer proof of our works.

As to our future, our plans call for community enrollments everywhere in the state, so that any individual, of whatever occupation or sex, may participate in our efforts for the common good, and in our efforts to hold intact for the people and the medical profession that serves them their inherent rights as American citizens to provide for their own needs, in such manner and to such extent as their needs and their own judgment and their own pleasures shall dictate.

TRANSFUSIONS BLAMED FOR INCREASE IN DISEASE OF BLOOD INCOMPATIBILITY

An apparent increase in the incidence of erythroblastosis, a combination of jaundice and anemia due to blood incompatibility which kills about 50 per cent of the infants born with it, is probably due to transfusions of Rh-positive blood given to Rh-negative women. This is the conclusion of an article appearing in *The Journal of the American Medical Association* for December 10.

The writers, L. M. Hellman, M.D., and G. R. Vosburgh, M.D., Baltimore, from the Department of Obstetrics of the Johns Hopkins University School of Medicine and the Johns Hopkins Hospital, point out that there are only two ways by which a woman whose blood is Rh-negative can acquire enough Rh antibodies in her bloodstream to give birth to an erythroblastotic child. The first of these is by repeated bearing of Rh-positive children—and the majority of her children will be Rh-positive if she is married to an Rh-positive man. In such an event her first and often her second child will be spared, however.

The second means by which such a woman may become sensitized is by the administration of an Rh-positive blood transfusion. "Women so sensitized produce Rh-positive children with the severest form of erythroblastosis who usually do not survive," the doctors write.

At the Department of Obstetrics of the Johns Hopkins Hospital there was only one case of erythroblastosis in 1,732 deliveries in 1937, the doctors also report, while in 1946 the incidence was one in 348 deliveries. "Such a phenomenon may well be related to the increased incidence of transfusion known to have taken place," they observe.

A history of previous transfusion occurs in but two per cent of all Johns Hopkins patients, yet in 27 instances of erythroblastosis a history of transfusion was present in seven women or 26 per cent. Two other Rh-negative women had also received blood transfusions which gravely jeopardized their subsequent childbearing careers, although the infants safely born to them at Johns Hopkins happened to be Rh-negative because their Rh-positive husbands carried one Rh-negative gene.

"With the increased use of transfusion the chance of unwittingly administering Rh-positive blood to Rh-negative women is definitely increased," Dr. Hellman and Dr. Vosburgh conclude. "Since such transfusions may be disastrous to future childbearing, even though many years may intervene, they can only be regarded as reprehensible; and in our opinion a high degree of negligence may be charged if transfusion is ever given to a female child, or women in the childbearing age, without first determining the Rh compatibility. In cases of dire emergency when time does not permit Rh determinations, only Rh-negative blood should be given."

Medical Panorama by the Associate Editor

MISSOURI announces a Woman's Auxiliary Essay Contest on the subject "Heroes of Medicine 1847-1947." Contest is open to students of all public, parochial, and private high schools of Missouri. First prize, $100 war bond; second, a $50 war bond; three awards of $25 war bonds. Winner to be a guest at the banquet of the associations' annual session in St. Louis.

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ONONDAGA COUNTY (New York) editoralizes, "What's Wrong?" "Comparatively, just about the cheapest thing which can be bought today is the service of a physician. When commodity prices, and the value of the dollar, are taken into consideration, doctor's fees are at a level which has obtained for several years. Certainly the charges for office and house calls have not risen in proportion to the price of an egg, or a steak, or a plumber's service. It is time that patients were made aware of this fact.

"Hospitals, clinics, health services, in fact all activities ancillary to the practice of medicine have found it necessary to increase their income. Too seldom do they publicly give recognition to the fact that it is the doctor who makes their activities possible. It is he who gives his service gratis, in many instances, while others are paid. It is not too much to ask them to keep this in mind when the medical profession is being maligned by self-seeking individuals. They should be informed of the viewpoint of the respectful members of a profession whose very deepest urge is service.

"The small number of physicians who actively interest themselves in public relations is evidence that most doctors are interested only in caring for their patients. And it has often been unfortunate for them and their families, when, failing to realize the importance of monetary values, they have found themselves in the position of those whom they once cared for in free clinics.

"Somehow, somewhere, now, there should be strong representation made to the effect that doctors' fees may rightly increase with a general increase in living costs. This applies most forcefully to all set fee-schedules. Are artisans working for schedules four years old? Who is the sucker on a contract for medical care? Certainly not the patient, or the employer, or the insurance carrier. What's wrong with a sliding scale?

"And what's wrong with the means test? The Government itself insists on it in Federal housing projects. The medical profession has always applied it, up and down; mostly down. It is sickening to observe the squandering of a family's money on non-essentials, and then to hear them yelling about the cost of sickness. It is high time that the old-fashioned question of who's to pay the doctor if we don't save something, is again raised. And it applies to all and sundry heretofore mentioned.

"Sometime the medical profession may really get up on its ear and remind folks that it takes a long time to make a doctor and that few of them die rich."

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WASHINGTON, D. C., announces termination of the agreement between the Medical Society and the Veterans Administration for local medical care of the veteran. After spending a great deal of time and effort in working out a fee schedule which was acceptable, and arriving at a definite point of willingness to co-operate, the old silent treatment followed. Finally, Dr. Hawley advised the society that the Regional Office was "equipped in staff to meet its responsibilities and from the present outlook it is fully anticipated that for the coming fiscal year it is in a position to cope with the situation with its own staff." The "Observer" concludes: "there is one regrettable aspect of this matter, and that is that the society went to considerable length to co-operate with the Veterans Administration when some officials of the administration must have known that it was merely an idle gesture."

What's Going On In Indiana by the Executive Secretary

Malpractice Insurance Rates Cut. After a thorough study of malpractice insurance by a special committee, the Indiana State Medical Association in 1944 decided that the Saint Paul-Mercury Indemnity Company gave the best coverage for the premium and recommended the company to the membership. The idea was not to exclude other insurance companies which write good malpractice insurance, but by getting a large portion of the physicians insured in Saint Paul-Mercury, to obtain a lower rate. This goal was reached January 1, 1948. On that date the primary rate for 5/15 limits was reduced to $20.00 from $21.54 at the inception of the plan, which means a considerable saving to the membership. In view of the fact that one prominent company is notifying physicians at the expiration of their present policies that the premium will be just twice as much when they renew, the action taken nearly four years ago by the association seems a wise and foresighted one.

——ISMA——

A.M.A. Membership and Fellowship Defined. The membership classifications of the American Medical Association are very confusing. As it is incumbent upon your executive secretary to report that Fellowship dues and the subscription price of The Journal of the A.M.A. both have been upped from $8.00 a year to $12.00 by the House of Delegates, it seems an appropriate time to clarify the matter. Every member of a state medical association in good standing is automatically a member of the American Medical Association and, as such, does not pay any dues to the A.M.A. A member of the A.M.A. who is a graduate of a recognized medical school is eligible to apply for Fellowship. The application is acted upon by the Judicial Council and, if approved, the applicant becomes a Fellow, pays $12.00 a year dues and receives The Journal, or may choose some other A.M.A. periodical. The yearly Fellowship dues are paid direct to the A.M.A. Of the 137,000 members of the American Medical Association, approximately 70,000 are Fellows. Only Fellows are eligible to attend A.M.A. scientific assemblies, and only Fellows get The Journal without subscribing for it. As The Journal has 135,000 subscribers, this leaves 65,000 physicians not Fellows who are buying The Journal. Most of them, probably, could enjoy the advantages of Fellowships without additional cost if they would make application. It is suggested that Indiana physicians check up on their eligibilities and, if they are now Journal subscribers and can become Fellows, that they do so.

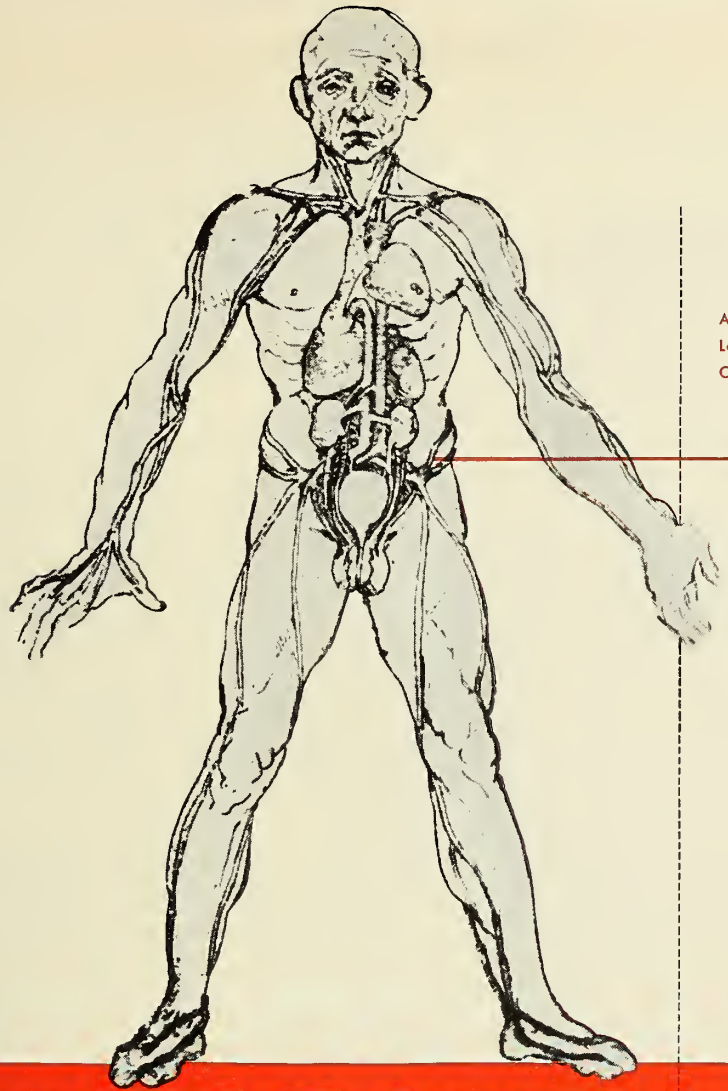
New Constitution and By-Laws. If you have scanned President Nafe's committee appointments in the front of this JOURNAL you will have observed that he has named a Committee on Constitution and By-Laws. It is the judgment of Doctor Nafe, and others, that these two instruments need revision. It has been ten years since they were thoroughly revised, but small changes have been made from time to time. Now, in the light of new ideas of organization, it seems appropriate that the Constitution and By-Laws should be brought up to date. Doctor Romberger, the immediate past president, has suggested the addition of a vice-president and a speaker of the house. In most other state associations the president-elect assumes the presidency at the annual meeting, usually with some brief ceremony, such as the retiring president turning over the gavel to his successor. In Indiana the change over now takes place on January 1 without any rites. There may be need for more or different standing committees, a better way of selecting honorary members, et cetera. The committe assigned the revamping task will likely make a detailed study of Constitutions and By-Laws of other state societies. It has a big and important job cut out for it.

—ISMA—

Registration Figures. The 1947 annual registration law, which became effective last year and requires all persons engaged in the healing arts in Indiana to register with the State Board of Medical Registration and Examination, has produced some interesting statistics. As of January 8, 1948, there were in practice 3,826 medical doctors, 71 osteopaths, 39 osteopaths eligible to do unlimited practice, and 464 drugless healers. The breakdown on the non-resident licensees of the same date: 212 medical doctors, 14 osteopaths, 2 osteopaths eligible to do unlimited practice, and 33 drugless healers. Funds from the registration fees are financing investigations of alleged violators of the Medical Practice Act. The board has employed one investigator and expects to engage another soon. Individuals practicing the healing arts unlawfully appear to be in for a rough time.

——ISMA——

Medical Public Relations. Betterment of public relations of the medical profession is the objective of the 1948 Committee on Public Relations, chairmanned by Dr. J. Neill Garber of Indianapolis. Data on the public relations programs of other state associations is being collected and will be studied by the committee. Physicians are becoming more and more public relations conscious, and sentiment to "do something" seems widespread.



Anotomic drawing by
Leonordo do Vinci—
Courtesy, The Bettmonn Archive.

Leonardo da Vinci (1452-1519)

was well ahead of his time, for physicians of his day knew little of the function of the heart or the treatment of its diseases, although da Vinci's knowledge of such anatomy was extensive.

Physicians of today prescribe

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—a modern treatment for congestive heart failure, bronchial asthma, paroxysmal dyspnea and Cheyne-Stokes respiration.

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SEARLE

RESEARCH
IN THE SERVICE
OF MEDICINE

News Notes

Dr. William T. Douglas has moved his practice from Earl Park to Montpelier.

The marriage of Miss Margaret Peters and Dr. Roy A. Geider, both of Indianapolis, was read at 2:30 p.m., December eleventh, at the Irvington Presbyterian Church, in Indianapolis. Dr. and Mrs. Geider will reside at 5816 Pleasant Run Parkway, in Indianapolis.

Dr. Philip C. Hennessee, who has completed a residency in surgery at the Indianapolis General Hospital, is now associated with Dr. Donald E. Spahr in the practice of surgery at Portland.

Dr. George Garceau, of Indianapolis, has accepted a request to serve as civilian consultant to hospitals in the American zones of occupation in Europe. He will serve as consultant to approximately fifteen hospitals, in the field of orthopedics. He expects to be gone for six weeks to three months.

Dr. Thomas Middleton, of Mitchell, has accepted a residency at the Childrens Hospital, at Pittsburgh, Pennsylvania.

After completing a residency at St. Mary's Hospital, in Evansville, Dr. Noel L. Neifert has opened an office in Tell City, for the general practice of medicine. He is a graduate of the University of Kansas, and served his internship at the United States Marine Hospital in San Francisco. He served in the army for two years.

Dr. Norman F. Richard and Dr. V. Brown Scott, of Shelbyville, have become partners in the Inlow Clinic there.

Dr. Louis F. Sandock, of South Bend, has opened offices at 406-7 Platt Building there, for the practice of medicine. He graduated from the Indiana University School of Medicine in 1941, and interned at Memorial Hospital in South Bend. Doctor Sandock spent three and one-half years with the Third Air Force, and was released from the army with the rank of major. For the past two years he has been a staff member of the department of internal medicine at Billings Memorial Hospital, and the University of Chicago Clinic.

Dr. Malcolm Scamahorn is now associated with his father, Dr. O. T. Scamahorn, in Pittsboro, in the general practice of medicine. Dr. Malcolm Scamahorn was recently discharged from military service, after serving with the occupational forces in Germany. He is a graduate of the Indiana University School of Medicine, and served his internship at the Methodist Hospital in Indianapolis.

Dr. Eugene W. Austin is now associated with Dr. Harold D. Lynch, at 216 S. Riverside Drive, in Evansville, where he is specializing in pediatrics. A native of Anderson, Doctor Austin is a graduate of Indiana University School of Medicine. He entered the Army in July, 1941, and went on inactive status in October, 1945, as a major and group flight surgeon. Following his separation from service, Doctor Austin served a two-year residency in pediatrics at the Riley Hospital in Indianapolis.

Announcement has been made of the association of Dr. John M. Bretz with his father, Dr. W. D. Bretz, for the general practice of medicine and surgery, in Huntingburg. A graduate of Indiana University School of Medicine, Dr. John Bretz spent three and one-half years with the Armed Forces, eighteen months of which were spent in the European Theater with the 83rd Infantry Division. Since his separation from service he has served as surgical assistant at Welborn Memorial Hospital, in Evansville, and has taken special training in obstetrics and gynecology at the Chicago Lying-In Hospital.

Dr. Charles C. Chapin, who resigned as superintendent of the Logansport State Hospital, has been appointed medical superintendent of the Wabash Valley Sanitarium, in LaFayette. He succeeds Dr. J. W. Shafer, who is retiring.

Dr. Sam W. Campbell, of Carmel, has taken over the practice of Dr. Ross Cooper, who died there recently. Doctor Campbell, recently released from army service, held the rank of captain, and was stationed at Fitzsimmons General Hospital, at Denver, where he was orthopedist. He did similar work at the hospital at Camp Atterbury.

Announcement has been made of the appointment of Dr. Alfred W. Snedeker as superintendent of the Richmond State Hospital. He succeeds Dr. O. R. Lynch, who resigned recently. Doctor Snedeker is a graduate of the Medical School of Cornell University, following which he trained and taught at the Phipps Psychiatric Clinic, at Johns Hopkins University. His experience has included a year and one-half with the mental hygiene program of New Hampshire, assistant superintendent of the Vermont State Hospital, extern on neurology at Bellevue Hospital, in New York, and two years as clinical director of the Philadelphia State Hospital. During the war Doctor Snedeker served for four years as chief of psychiatric services. He resigned as chief of the outpatient section of the neuropsychiatric division of the Veterans Administration in Washington to take his new position.

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Indiana Physicians Help Organize Heart Foundation

Indiana is taking the lead in establishment of a foundation for advancement of knowledge in the field of cardiovascular diseases. Physicians and the laity of the state have joined forces in a community effort to provide additional resources and to conduct an educational campaign throughout Indiana.

The organization was started at a meeting in Indianapolis, January 18, at which time the following trustees were elected: Dr. Robert M. Moore, chairman, Dr. George S. Bond, Dr. Kenneth G. Kohlstaedt, Jr., all of Indianapolis; Dr. A. N. Ferguson, Fort Wayne; Dr. George M. Cook, Hammond; Dr. Walter S. Fisher, Columbus; Dr. Harry P. Ross, Richmond; Russell White, treasurer; Willis B. Conner, Louis Borinstein, Miss Sally Butler, and Samuel R. Harrell, all of Indianapolis; Mrs. Cogley Cole, Vevay, and Ernest Hawkins, Fowler. Another trustee, Dr. Donald E. Wood, Indianapolis, was appointed by Dr. Cleon A. Nafe, President of the Indiana State Medical Association. Mr. Harrell is treasurer of the American Heart Association, Inc., with which the Indiana group will be affiliated.

Plans were made to participate in National Heart Week, February 8 through February 14, which is a nation-wide observance. Eighty-five per cent of the funds collected in Indiana during this period, through sale of seals, will be retained by the Indiana Heart Foundation.

The foundation's headquarters will be at 711 Electric Building, Indianapolis. Kenneth R. Miller, of Indianapolis, is acting secretary. Officers of the foundation will be elected later.

Annual Sectional Meeting of American Congress of Physical Medicine

The Midwestern Section of the American Congress of Physical Medicine will hold its annual sectional meeting and seminar February twenty-six and twenty-seven, 1948, at the Veterans Administration Hospital, Hines, Illinois, with registration at 10:00 a.m., Thursday, February twenty-six. A seminar on spinal cord injuries will follow at 11:00 a.m. The program includes conducted tours of the physical medicine rehabilitation activities at the hospital. All sessions will be open to physicians, other professional personnel, and their guests. For information concerning the meeting, address the Chairman, Dr. L. B. Newman, Chief, Physical Medicine Rehabilitation Service, V. A. H., Hines, Illinois, or the Secretary, Dr. C. O. Molander, Director, Department of Physical Medicine, Michael Reese Hospital, Chicago 16, Illinois.

Chicago Medical Society Clinical Conference

The Chicago Medical Society will hold its Fourth Annual Clinical Conference at the Palmer House, Chicago, on March 2, 3, 4, and 5, 1948. This Conference represents an intensive four day postgraduate course for the general practitioner and specialist, with leading teachers from all over the United States.

The morning and afternoon lectures, the panel discussions, the clinicopathologic conference, and the round table discussions each noon will cover newer methods of diagnosis and treatment which will be of interest to all physicians. The scientific and technical exhibits will be of the highest quality and attractively presented. The Chicago Medical Society extends all physicians a most cordial invitation to come to Chicago for the conference. Reservations should be made direct with the Palmer House.

Appointment of Commissioned Officers in the Medical Corps of the Regular Navy

The statutory authority contained in Public Law 365—80th Congress, Title II (Army-Navy Public Health Service Medical Officer Procurement Act of 1947) makes it possible now for civilian doctors to become commissioned officers in the Regular Navy, provided they meet the professional and physical qualifications. This law is unique in that it does away with, for the first time, the age limitation of thirty-two years of age and permits doctors in civilian practice to enter the Navy and be commissioned with the rank up to and including Captain. The law considers all strata of the medical profession, interns, residents, reserves, former medical officers who have resigned, and present practicing physicians.

In order to make application a doctor must be a citizen of the United States, a graduate from a Class "A" medical school and have served at least one year's internship in an approved hospital. Candidates will then be judged on a number of qualifications such as being a member of a specialty board, his teaching connections, the number of years of professional or scientific practice, hospital or laboratory connections, and a statement of military service.

The allocation of rank to successful candidates will depend upon their academic age, professional standing, and experience in the medical field. Successful candidates will then be integrated in line with medical officers of the regular Navy and assigned running mates accordingly. This means that they will be eligible for promotion along with their fellow officers of equal rank.

This law offers a fine opportunity for civilian doctors to make a career in the regular Navy and to enjoy its professional advantages as well as its retirement benefits. Doctors interested in such a career should write to the Bureau of Naval Personnel, via the Bureau of Medicine and Surgery, Navy Department, Washington, D.C.

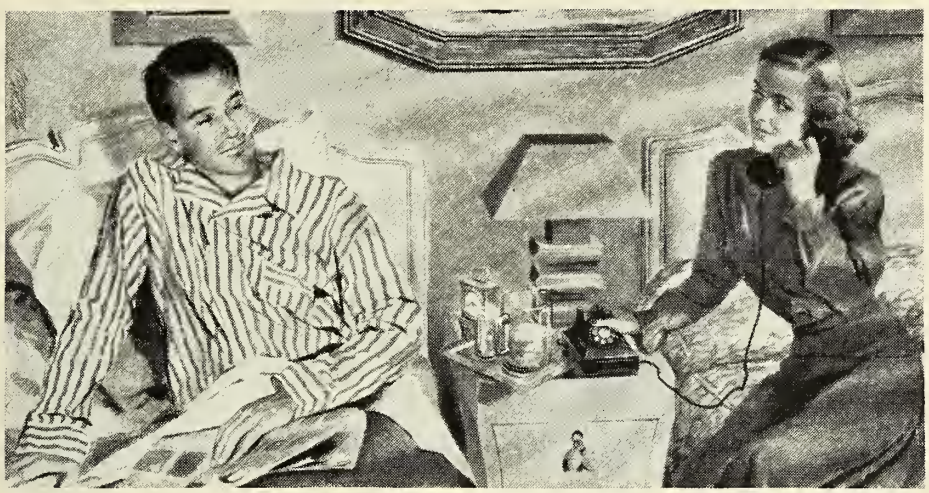
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Some things you should know about the common cold

No. 209 in a series of messages from Parke, Davis & Co. on the importance of prompt and proper medical care.



MOST PEOPLE in the United States and Canada have two or more colds a year, each lasting about two weeks and causing a considerable amount of stuffy discomfort.

The danger of the common cold lies mainly in the other infections that may follow after it. For a cold lessens your resistance, and is likely to pave the way for other, more serious, respiratory ailments.

Sinusitus, ear infections, bronchitis, and the various forms of pneumonia are frequently ushered in by a cold. Pneumonia, particularly, is likely to attack a person who is overtired, or run-down because of a severe cold.

True, many of these respiratory diseases are not as dangerous as they used to be. (Modern infection-fighting drugs—such as penicillin and the sulpha drugs—offer highly effective treatment for many cases.)

But, of course, it is always better to *prevent* a serious illness whenever possible.

If you have a cold, it's just good sense to stay away from people, to avoid spreading the infection; and to get plenty of rest—in bed if possible.

If your cold is accompanied by fever, a persistent cough, or a pain in the chest, face, or ear, call your doctor at once.

The sooner you seek his help, the more he can do to help you avoid a long and serious illness.

And, in the case of children, an early examination may disclose that what appears to be only a cold may instead be a starting symptom of an entirely different disease, such as measles or scarlet fever.

SEE YOUR DOCTOR. Never try the foolhardy experiment of dosing yourself. Your doctor's treatment of one illness may be quite different from his treatment of another illness which appears the same to you.

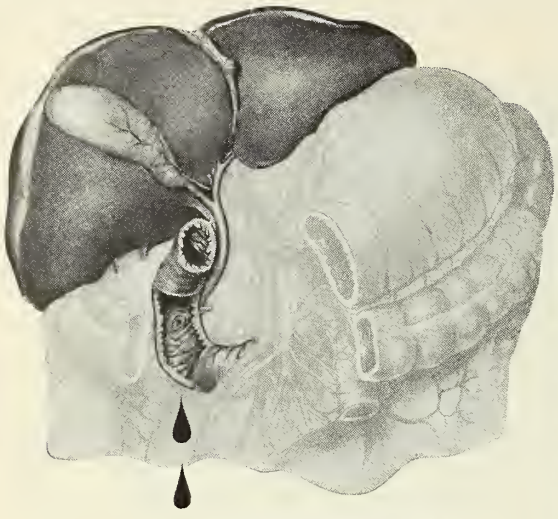
Let your doctor diagnose your ailments. Let him decide what treatment is best for your particular case. Then follow his instructions to the letter. His advice is the only advice you should take on any question that concerns your health.

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"The object of the medical procedure is to assist in draining an infected organ."*

The specific hydrocholeretic action of Decholin (chemically pure dehydrocholic acid) accomplishes this purpose.

Decholin induces bile secretion which is thin and copious, flushing the passages from the liver to the sphincter of Oddi, and carrying away infectious and other accumulated material.

How Supplied: Decholin in 3¾ gr. tablets. Packages of 25, 100, 500 and 1000.

*Albrecht, F. K.: Modern Management in Clinical Medicine, Baltimore, The Williams and Wilkins Co., 1946, p. 170.

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AMES COMPANY, INC.
ELKHART, INDIANA

Dr. John Van Kirk has opened an office in Burlington for the general practice of medicine. A graduate of the Indiana University School of Medicine, he served his internship at St. Elizabeth Hospital, in LaFayette. For the past two years, Doctor Van Kirk served with the medical unit in Japan with the United States Army.

Dr. Thomas Horwitz, formerly of New York City, has opened an office for the practice of orthopedic surgery at 423-424 Hume-Mansur Building, in Indianapolis. He is a graduate of Jefferson Medical College, in Philadelphia, and received his orthopedic training at the Hospital for Joint Diseases in New York City, in 1935 and 1936. Doctor Horwitz practiced orthopedic surgery since that time, in Philadelphia, where he was a member of the staff of the Jefferson Medical College. In 1942 he entered military service with the Jefferson Unit, and remained in service until 1946, with the rank of colonel. He returned to practice in orthopedic surgery in New York City, where he was a Brown Research Fellow at the Hospital for Joint Diseases, and was associated in private practice with Dr. Samuel Kleinberg, until his transfer to Indianapolis.

National Conference on Medical Service

Chicago again plays host to the National Conference on Medical Service, Sunday, February 8. The program features discussions of important controversial problems affecting medical practice, hospitals and nursing, and promises to be of outstanding interest to general practitioner and specialist alike.

President of the Conference Creighton Barker, M.D., New Haven, Connecticut, will open the 1948 session in the Red Lacquer Room of the Palmer House at 9:30 a.m. The morning program will develop two viewpoints on the subject, "The Practice of Medicine by Hospitals, Health Departments and Medical Schools" through papers presented by Everett W. Jones, General Manager of the Modern Hospital, Chicago, and Lowell S. Goin, M.D., of Los Angeles. L. Fernald Foster, M.D., Bay City, Michigan, will speak on "Medical Public Relations Begin in the Doctor's Office." "Nursing Problems in America" will be reviewed by Thomas P. Murdock, M.D., of Meriden, Connecticut, and Janet Geister of Chicago.

The afternoon has been given over to panel presentations on the two subjects, "General Practice" and "Specialty Boards," participated in by Wingate M. Johnson, M.D., Winston-Salem, North Carolina; C. F. Wilkinson, M.D., Ann Arbor, Michigan; Leroy E. Parkins, M.D., Boston; Paul Titus, M.D., Pittsburgh, and C. N. H. Long, M.D., New Haven, Connecticut. This will be followed by discussion with general audience participation.

The noon luncheon will offer a nationally known speaker to be announced later.

Midwestern Sectional Meeting, American Congress of Physical Medicine

A seminar on spinal cord injuries will feature the midwestern sectional meeting of the American Congress of Physical Medicine at the Veterans Administration hospital, Hines, Illinois, on February 26-27. Physicians associated with Northwestern University Medical School, the University of Illinois College of Medicine, and the Veterans Administration hospital at Hines will appear on the program. The program will be of interest to all physicians. Dr. Louis B. Newman, chief of physical medicine rehabilitation service at Hines, serves as chairman of the midwestern section of the ACPM. Dr. Charles O. Molander, director of physical medicine at Michael Reese hospital, Chicago, is secretary. Registration is scheduled for 10-10:30 a.m., Thursday, February 26, at Vaughn Unit theatre.

1948 Midwest Radiologic Conference

The 1948 Midwest Radiologic Conference is to be held at the Hotel Schroeder in Milwaukee, Wisconsin, February 6-7, 1948, and will be followed immediately thereafter by the annual conference of teachers of radiology in Chicago, February 8. The dinner speaker on Friday evening, February 6, will be Dr. Robert R. Newell, Professor of Radiology, Stanford University School of Medicine, San Francisco, California. Inquiries concerning the details of the meeting may be addressed to Dr. A. Melamed, Secretary, Milwaukee Roentgen Ray Society, 425 East Wisconsin Avenue, Milwaukee 2, Wisconsin.

"Find the Missing Million"

A million persons each year are lost to constructive living through the contraction of a venereal disease, according to figures of the United States Public Health Service, a needless waste of humanity, for medical science has developed treatment to arrest these diseases and to break the chain of communication from one person to another. "Find the Missing Million" is to be the topic of a talk by Dr. Mabel G. Lesher, internationally known social hygienist and graduate of Johns Hopkins, at a public meeting of the Indiana and Indianapolis Social Hygiene Associations on Saturday, March 13, at 12:15 at the Marott Hotel, Indianapolis.

Dr. Lesher is the Chairman of the Committee on Social Hygiene Education of the New Jersey Department of Public Instruction, instructor of Social Hygiene at Rutgers University, and past chairman of Social Hygiene of the New Jersey Congress of Parents and Teachers.

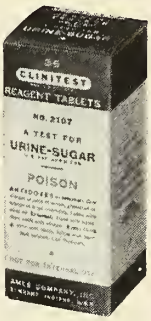
Reservations for the luncheon meeting may be secured by addressing Mrs. Meredith Nicholson, Jr., 1140 East Market St., Indianapolis. Tickets will be $1.65. Guests are welcome for the meeting only as well as for the luncheon.

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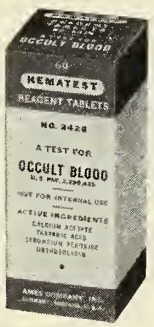
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SIMPLE AND SPEEDY

Drop one Clinitest Tablet in indicated amount of diluted urine—watch for reaction—compare with color scale.

OCCULT BLOOD



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TABLET METHOD

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Place one drop of specimen solution or suspension on filter paper. Set Hematest Tablet in center of moist area and allow 2 drops water to trickle down from top of tablet to paper. Color reaction on paper denotes presence of blood.

Full information on request.

AMES COMPANY, INC.

ELKHART, INDIANA

Deaths

Harry F. Mitchell, M.D., of South Bend, died there on December twenty-first, following a long illness. He was eighty-one years of age. He was a graduate of Queen's University Faculty of Medicine, Kingston, Ontario, in 1889. He practiced in Ontario before coming to Lakeville, and later to South Bend. Doctor Mitchell was an honorary member of the St. Joseph County Medical Society and the Indiana State Medical Association and was a Fellow of the American Medical Association.

* * *

Solomon L. McPherson, M.D., of Washington, died in the Daviess County Hospital there on December thirty-first, at the age of eighty-eight years. He graduated from the Kentucky School of Medicine, in Louisville, in 1882, and had practiced for more than fifty years. Doctor McPherson was an honorary member of the Daviess-Martin County Medical Society, and the Indiana State Medical Association, and was a member of the American Medical Association.

* * *

Lindsay O. Walters, M.D., of Muncie, died on December twenty-seventh, in Orlando, Florida, where he had moved following his retirement last year. He was seventy-four years of age. A graduate of St. Louis College of Physicians and Surgeons, in 1899, Doctor Walters had practiced in Muncie for twenty years. He was a member of the Delaware-Blackford County Medical Society and the Indiana State Medical Association, and was a Fellow of the American Medical Association.

* * *

Paul H. Beard, M.D., of Indianapolis, died at his home on December twenty-second, at the age of forty-five. Doctor Beard was a graduate of Northwestern University Medical School, Chicago, in 1927, and had practiced surgery in Indianapolis for ten years. He was a navy veteran of World War II, and had served in the South Pacific. He was a member of the American College of Surgeons, the Marion County Medical Society and the Indiana State Medical Association, and was a Fellow of the American Medical Association.

John C. Brink, M.D., of Gary, died after an illness of approximately two months, at the age of thirty-five. He was a graduate of Indiana University School of Medicine, in 1942, and following one year of internship at the Methodist Hopital, in Indianapolis, had served for three years as resident in surgery at the Receiving Hospital, in Detroit. Doctor Brink was a member of the Lake County Medical Society, the Indiana State Medical Association, and the American Medical Association.

* * *

William P. Alexander, M.D., of Gary, died on December seventeenth, after a short illness. He was ninety years of age. He had practiced medicine in Gary since 1907, and prior to that time had practiced in Ridge Valley, Gas City and Camden. Doctor Alexander graduated from the Eclectic Medical College of Cincinnati, in 1892, and was an honorary member of the Lake County Medical Society and the Indiana State Medical Association, and a member of the American Medical Association.

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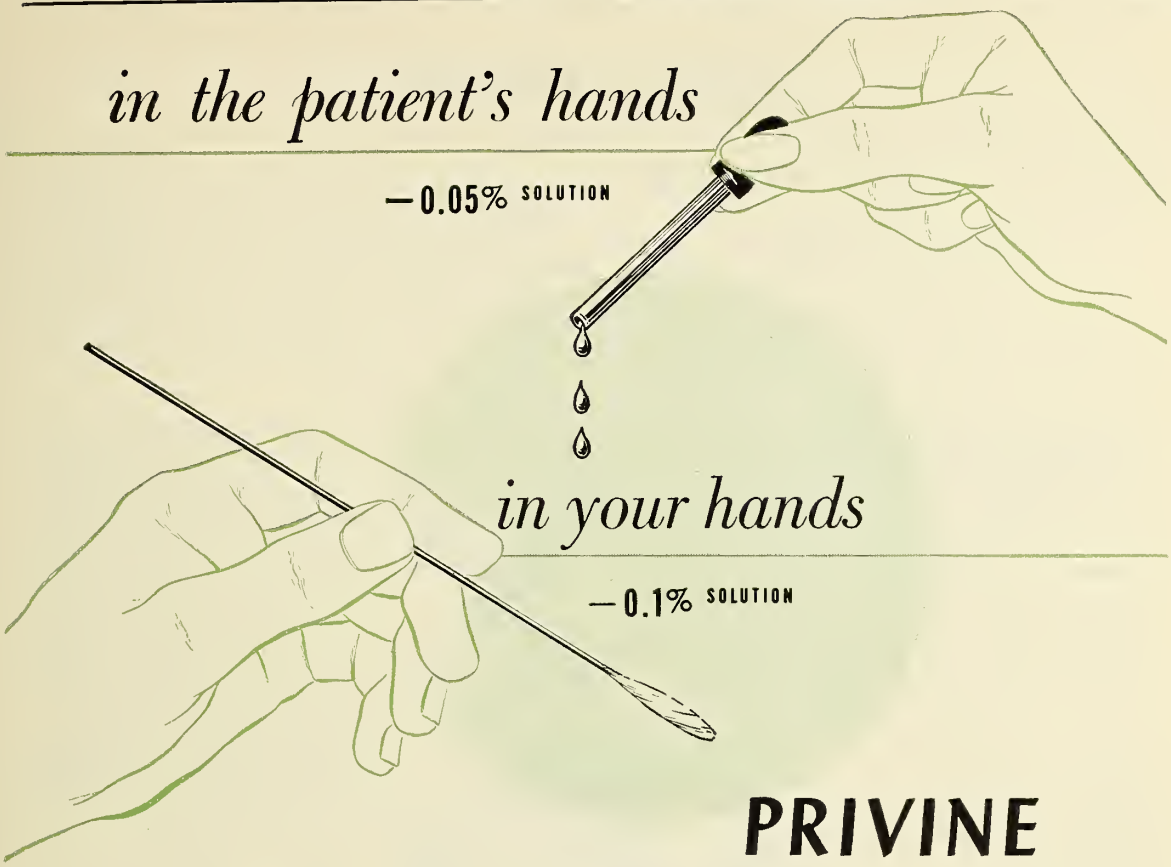
Rilus E. Jones, M.D., formerly of Clayton, died in Los Angeles, California, on December eighth, at the age of sixty-nine years. He had practiced in Clayton for forty-two years, but moved to California in 1946, due to ill health. He graduated from the Medical College of Indiana, in Indianapolis, in 1901, and was a member of the Hendricks County Medical Society, the Indiana State Medical Association and the American Medical Association.

* * *

Jack A. C. King, M.D., of Vevay, died in Lima, Ohio, after a short illness. He was forty-one years of age. A graduate of the University of Michigan Medical School, at Ann Arbor, in 1933, Doctor King had gone to Vevay to establish practice in 1937. At the time of his death he was president of the Switzerland County Medical Society, and was a member of the Indiana State Medical Association and the American Medical Association.

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Society Reports

INDIANA STATE MEDICAL ASSOCIATION

EXECUTIVE COMMITTEE

December 14, 1947.

Roll call showed the following present: C. H. McCaskey, M.D., chairman; Walter L. Portteus, M.D.; Floyd T. Romberger, M.D.; Cleon A. Nafe, M.D.; A. P. Hauss, M.D.; A. F. Weyerbacher, M.D.; Albert Stump, attorney, and Ray E. Smith, executive secretary.

Guest: A. M. Mitchell, M.D., chairman, Committee on Secretaries' Conference.

Membership Report

Number of members Dec. 13, 1947	3,605*
Number of members December 31, 1946	3,509
Gain over last year	103
Number of members December 31, 1946	3,509

*Includes 127 in military service (gratis)
172 honorary members

Treasurer's Office

Annual audit. George S. Olive and Company will make the 1947 audit of the books.

"Save the Shades" campaign. It was taken by consent that the association should not make a contribution to this fund because most physicians are giving as individuals.

1947 Annual Session, French Lick, October 28, 29, 30, 1947

The president-elect and the secretary reported on the recent meeting at French Lick.

Statements of receipts and expenditures for October and November for the association committees and THE JOURNAL were approved.

1948 Annual Session, Indianapolis

Dates set—October 26, 27, and 28, 1948.

Indiana Health Officers meeting probably will be held on Monday, October 25.

The committee voted to recommend to the Council that the 1949 meeting be held during the period beginning Tuesday, October 4, the number of days to be decided later. This action was taken on the motion of Drs. Nafe and Romberger.

Appointment of members of Committee on Scientific Exhibit. On motion of Drs. Romberger and Portteus, the committee personnel as recommended by the incoming president was approved.

Legislative Matters

Local

At the direction of the House of Delegates, *Hygeia* has been ordered sent to the 145 present members of the Indiana General Assembly for the year 1948.

The executive secretary reported on a conference he had held with the Secretary of State in which the Secretary of State reported on the difficulties in administering the 1947 lapse of consciousness law. Approximately fifty persons a month are losing their driver's license upon physicians' reports that they are subject to attacks. On motion of Drs. Portteus and Romberger, the subject was referred to the Committee on Traffic Safety.

Organization Matters

Honorary members. The headquarters office was directed to notify the ten physicians who are eligible to honorary membership, whose names were not submitted to the House of Delegates in October, to ask the secretaries of their respective medical societies to send their names to the Council for consideration at its meeting on January 18, 1948.

Officers of the Section on Obstetrics and Gynecology. The question of appointing officers for the newly-created Section on Obstetrics and Gynecology was referred to the president-elect for action.

Letter from Dr. J. T. Oliphant, acknowledging nomination for the A.M.A. general practitioners award, was read.

Fifty-Year Club.

a. 204 members to date.

b. Many letters of appreciation have been received by the headquarters office from recipients of Fifty-Year Club awards.

Membership in the American Public Health Association was approved on motion of Drs. Nafe and Portteus.

Resignation of Dr. Forster. Letter announcing resignation of Dr. Forster, associate editor of THE JOURNAL and alternate delegate to the American Medical Association, was read by the chairman of the committee. It was taken by consent that the Council members be notified so they may elect successors to Dr. Forster on January 18, at the midwinter meeting of the Council.

Medical Economics

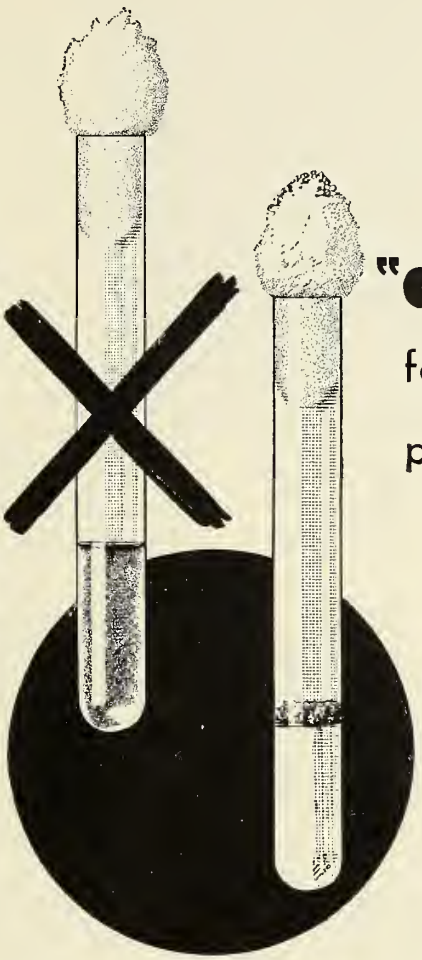
Complaint of CIO against charges for penicillin. The president-elect proposed that he and the executive secretary call on the secretary of the CIO and give him the correct information.

On motion of Drs. Romberger and Portteus, the Indiana delegates to the American Medical Association House of Delegates are to be instructed to oppose the policy of hospitals and medical schools engaging in the practice of medicine for profit.

Future Medical Meetings

January 4, 1948—Midwest Regional Conference, Cleveland. On motion of Drs. Nafe and Portteus, the chairman of the Committee on Public Relations was authorized to attend this meeting.

CONTAMINATION TEST of penicillin broth—*one of the 138 separate tests carried out by Abbott in the production of dependable penicillin.* Tubes of sterile nutrient are inoculated with samples of broth from the fermentation tanks and then incubated. Broth contaminated by bacteria turns cloudy; noncontaminated broth remains clear. Besides bacteria, other invaders to guard against are yeasts and wild molds. Some contaminants merely use up nutrients and reduce penicillin yield; others—such as the gram negative bacteria of the coliform group—produce penicillinase, which destroys the penicillin in the broth.



"all clear"

for better penicillin

Penicillin mold, new growth.

Clear, sterile broth.

Tests and more tests—138 in all—make Penicillin Abbott a product you can use *with confidence.* These 138 separate Abbott tests—exclusive of those made by the Food and Drug Administration—guard the product through tanks, filters, dryers, filling machines and other stages. Besides checking on contamination, the 138 tests cover potency, sterility, pyrogens, toxicity, G content, heat stability, pH, moisture, weight, solubility and crystallinity.

They are your assurance that Penicillin Abbott—whether in cartridges, vials, tablets, troches or ointments—is absolutely dependable. Your pharmacist has Abbott Penicillin Products in stock and will be pleased to fill your needs. For descriptive literature, just send a card to ABBOTT LABORATORIES, North Chicago, Illinois.

Specify **abbott** PENICILLIN PRODUCTS

January 5 and 6, 1948—Interim meeting of A.M.A. House of Delegates, Cleveland.

January 5 and 6, 1948—Industrial Health Conference of the A.M.A., Cleveland. The chairman of the Committee on Industrial Health was authorized to attend this conference.

January 5, 1948—Grass Roots Conference of County Medical Society Officers, Cleveland.

January 7 and 8, 1948—Scientific program for general practitioners, Cleveland.

January 18, 1948—Midwinter meeting of the Council of the Indiana State Medical Association. Meeting of Budget Committee.

February 6 and 7, 1948—National Conference on Rural Medical Services, Chicago. The chairman of the Committee on Rural Medical Care was authorized to attend this meeting.

February 15, 1948—Annual Secretaries' Conference, Indiana State Medical Association. The chairman of the Committee on Secretaries' Conference submitted the program for this meeting and it was approved by the Executive Committee.

The Journal

Report on advertising:

Additions	$ 136.80
Decreases	86.70
Total increase, November and December	50.10
Total increase for year	$2,146.51

Professional cards.

a. On motion of Drs. Nafe and Portteus it was voted to reduce the size of professional cards from 1½" to 1" so that fourteen instead of ten cards might be printed per page.

b. On motion of Drs. Nafe and Romberger, professional cards now appearing in THE JOURNAL, and those submitted for publication in the future, are to be referred to the county medical society in which the member holds his membership for approval, in order that no member not recognized as a specialist may so advertise himself.

Medical Defense

The secretary read a letter from the St. Paul-Mercury Indemnity Company revealing a reduction in its rates from $21.75 to $20.00 for $5/15,000 limits.

The secretary reported that one of the large companies writing malpractice insurance was doubling its rates on expiration of policies now in effect.

There being no further business, the meeting was adjourned.

BUREAU OF PUBLICITY

December 5, 1947

Present: H. G. Hamer, M.D., chairman, and Ray E. Smith, executive secretary.

The following "Hints on Health" columns were approved:

Week of December 29, 1947—"Scarlet Fever."

Week of January 5, 1948—"Sore Throat."

Week of January 12, 1948—"The Common Cold."

Booklet entitled, "Doctors and Horses," written by the public relations counsel of the Illinois State Medical Society, was read.

The secretary reported the work he had done on the proposed exhibit for display in connection with the Centennial Celebration in 1949. He was directed to contact the chairman of the Centennial Celebration Committee and inquire whether his committee objected to the Bureau of Publicity sponsoring such a project.

A letter was read from the chairman of the Radio Committee of the Woman's Auxiliary to the Indiana State Medical Association stating that she was preparing script for a live program over WFBM, Indianapolis, on December 29, 1947, in accordance with the bureau's request.

LOCAL SOCIETY REPORTS

100% IN PAYMENT OF DUES

GIBSON COUNTY
LA GRANGE COUNTY
ORANGE COUNTY
PERRY COUNTY

COUNTY MEDICAL SOCIETY OFFICERS

ALLEN (Fort Wayne) COUNTY MEDICAL SOCIETY
President, Richard H. Miller, Fort Wayne,
Vice-President, Orval J. Miller, Fort Wayne,
Secretary, A. P. Hattendorf, Fort Wayne,
Treasurer, Robert H. W. Brosius, Fort Wayne.

BOONE COUNTY MEDICAL SOCIETY
President, Robert H. Wiseheart, Lebanon,
Vice-President, Robert J. Ballard, Lebanon,
Secretary-Treasurer, Clarence G. Kern, Lebanon.

CARROLL COUNTY MEDICAL SOCIETY
President, George Wagoner, Delphi,
Secretary-Treasurer, C. L. Wise, Camden.

CASS COUNTY MEDICAL SOCIETY
President, Marian Hochhalter, Logansport,
Vice-President, M. S. Adamski, Logansport,
Secretary-Treasurer, Donald K. Winter, Logansport.

CLAY COUNTY MEDICAL SOCIETY
President, Robert K. Webster, Brazil,
Vice-President, Jack Glosson, Clay City,
Secretary-Treasurer, John M. Palm, Brazil.

CLARK COUNTY MEDICAL SOCIETY
President, Arthur Vandevert, Sellersburg,
Vice-President, M. P. Weems, Jeffersonville,
Secretary-Treasurer, George Regan, Sellersburg.

CLINTON COUNTY MEDICAL SOCIETY
President, Frank Beardsley, Frankfort,
Vice-President, H. T. Stout, Jr., Colfax,
Secretary-Treasurer, C. D. Holmes, Frankfort.

a
new
formula
for
public
health!



approved by *the Indiana medical profession*

The Indiana State Medical Association, years ago, realized the need for a new formula that would make adequate medical care available to all the people. That such a program should be on a voluntary, prepayment method was agreed. The State Association voted a committee of doctors to study the advisability of such a Plan—the committee report was favorable. The Society then established a committee to make further study and to make recommendation of a plan for organizing a program for Indiana.

The exhaustive research and study of this committee brought forth a simple formula for making adequate medical care available to all. The doctors themselves organized THE DOCTORS' PLAN, a nonprofit, voluntary Plan, through which the people of Indiana could prepay the cost of a great portion of their medical care costs. Now for a small membership fee — a few cents a day — THE DOCTORS' PLAN is helping solve a very important problem for over 150,000 Indiana people — BUT — everyone needs THE DOCTORS' PLAN—A million people should be covered.

Tell your patients about

THE DOCTORS' PLAN

Our own Plan for prepaid medical care

September 1, 1946
to
January 1, 1948
DOCTORS'
PLAN
HAS
PAID
$410,461.50
for
8,094 Claims

Help create a local demand—we will fill it

MUTUAL MEDICAL INSURANCE, Inc.

700 TEST BUILDING INDIANAPOLIS 4, INDIANA

DAVIESS-MARTIN COUNTY MEDICAL SOCIETY
President, A. G. Blazey, Washington,
Vice-President, Horace Norton, Crane,
Secretary-Treasurer, L. M. McNaughton, Washington.

DEARBORN-OHIO COUNTY MEDICAL SOCIETY
President, Leslie M. Baker, Aurora,
Vice-President, Charles F. Fletcher, Sunman,
Secretary-Treasurer, Charles N. Manley, Rising Sun.

DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY
President, William Deutsch, Muncie,
President-Elect, Guy A. Owsley, Hartford City,
Secretary, Joseph H. Clevenger, Muncie,
Treasurer, William J. Molloy, Muncie.

DE KALB COUNTY MEDICAL SOCIETY
President, D. M. Reynolds, Garrett,
Vice-President, Clayton B. Hathaway, Butler,
Secretary-Treasurer, Max Wills, Auburn.

ELKHART COUNTY MEDICAL SOCIETY
President, R. G. Horswell, Bristol,
Vice-President, R. B. Stout, Elkhart,
Secretary-Treasurer, George R. Bloom, Elkhart.

FAYETTE-FRANKLIN COUNTY MEDICAL SOCIETY
President, R. D. Morrow, Connersville,
Vice-President, H. N. Smith, Brookville,
Secretary-Treasurer, R. H. Elliott, Connersville.

GRANT COUNTY MEDICAL SOCIETY
President, Robert M. Brown, Marion,
Vice-President, Russell M. Hummel, Marion,
Secretary-Treasurer, Russell W. Lavengood, Marion.

GREENE COUNTY MEDICAL SOCIETY
President, Edwin Bailey, Linton,
Vice-President, Sam I. Rotman, Jasonville,
Secretary-Treasurer, George E. Moses, Worthington.

HENDRICKS COUNTY MEDICAL SOCIETY
President, A. N. Scudder, Brownsburg,
Vice-President, L. H. Ellis, Lizton,
Secretary-Treasurer, Ernest H. Price, Danville.

HUNTINGTON COUNTY MEDICAL SOCIETY
President, H. H. Marks, Huntington,
Vice-President, H. C. Woods, Markle,
Secretary-Treasurer, Thomas James, Huntington.

JAY COUNTY MEDICAL SOCIETY
President, George Morrison, Portland,
Vice-President, Basil Dulin, Portland,
Secretary-Treasurer, Frederick Streib, Portland.

KOSCIUSKO COUNTY MEDICAL SOCIETY
President, E. Winton Thomas, Warsaw,
Secretary-Treasurer, Dan L. Urschel, Mentone.

LAKE COUNTY MEDICAL SOCIETY
President, B. W. Harris, Gary,
President-Elect, H. W. Eggers, Hammond,
Secretary-Treasurer, H. M. Baitinger, Gary.

LAWRENCE COUNTY MEDICAL SOCIETY
President, Claude Dollens, Oolitic,
Vice-President, Julius B. Wohlfeld, Bedford,
Secretary-Treasurer, John P. Scherschel, Bedford.

MADISON COUNTY MEDICAL SOCIETY
President, W. L. Sharp, Anderson,
Vice-President, R. O. Zierer, Anderson,
Secretary-Treasurer, J. L. Lamey, Anderson.

MARION COUNTY MEDICAL SOCIETY
President, Bert E. Ellis, Indianapolis,
Vice-President, Maurice V. Kahler, Indianapolis,
Secretary-Treasurer, Roy A. Geider, Indianapolis.

MARSHALL COUNTY MEDICAL SOCIETY
President, Milan D. Baker, Culver,
Vice-President, Tom G. Sheller, Argos,
Secretary-Treasurer, L. W. Vore, Plymouth.

NOBLE COUNTY MEDICAL SOCIETY
President, Charles M. Bowman, Albion,
Vice-President, James R. Roth, Wolf Lake,
Secretary-Treasurer, Frank W. Messer, Kendallville.

ORANGE COUNTY MEDICAL SOCIETY
President, John Spears, Paoli,
Secretary-Treasurer, C. E. Boyd, West Baden Springs.

OWEN-MONROE COUNTY MEDICAL SOCIETY
President, Philip T. Holland, Bloomington,
Vice-President, M. S. Brown, Spencer,
Secretary-Treasurer, Abraham M. Owen, Bloomington.

PARKE-VERMILLION COUNTY MEDICAL SOCIETY
President, C. Harstad, Rockville,
Secretary-Treasurer, Dorothy B. Lauer, Dana.

PERRY COUNTY MEDICAL SOCIETY
President, N. A. James, Tell City,
Vice-President, F. C. Glenn, Tell City,
Secretary-Treasurer, David A. Dukes, Tell City.

PORTER COUNTY MEDICAL SOCIETY
President, Ralph C. Eades, Valparaiso,
Vice-President, J. C. Brown, Valparaiso,
Secretary-Treasurer, Theodore Makowski, Valparaiso.

POSEY COUNTY MEDICAL SOCIETY
President, Frank W. Oliphant, Mt. Vernon,
Vice-President, Paul Boren, Poseyville,
Secretary-Treasurer, L. John Vogel, Mt. Vernon.

RANDOLPH COUNTY MEDICAL SOCIETY
President, Byron Nixon, Farmland,
Vice-President, Arvin Henderson, Ridgeville,
Secretary-Treasurer, Harvey E. White, Farmland.

STEUBEN COUNTY MEDICAL SOCIETY
President, M. M. Crum, Angola,
Vice-President, Robert Barton, Angola,
Secretary-Treasurer, K. L. Kissinger, Angola.

SWITZERLAND COUNTY MEDICAL SOCIETY
President, George Ellerbrook, Vevay,
Vice-President, George Copeland, Vevay,
Secretary-Treasurer, Robert O. Zink, Vevay.

TIPPECANOE COUNTY MEDICAL SOCIETY
President, G. L. Derhammer, Brookston,
Vice-President, F. W. Ratcliff, Lafayette,
Secretary, J. C. Burkle, Lafayette,
Treasurer, Charles Hupe, Lafayette.

VANDERBURGH COUNTY MEDICAL SOCIETY
President, Dallas Fickas, Evansville,
Vice-President, George Willison, Evansville,
Secretary-Treasurer, Howard Slaughter.

WABASH COUNTY MEDICAL SOCIETY
President, O. G. Brubaker, North Manchester,
Vice-President, William Dannacher, Wabash,
Secretary-Treasurer, J. T. Stoops, Wabash.

WARRICK COUNTY MEDICAL SOCIETY
President, J. G. Hoover, Boonville,
Vice-President, W. C. Stover, Boonville,
Secretary-Treasurer, P. B. Hoover, Boonville.

WAYNE-UNION COUNTY MEDICAL SOCIETY
President, C. Emil Kenyon, Cambridge City,
Vice-President, Gayle J. Hunt, Richmond,
Secretary-Treasurer, Glen Ward Lee, Richmond.

WHITE COUNTY MEDICAL SOCIETY
President, H. B. Gable, Monticello,
Vice-President, J. V. Galbreth, Barnettsville,
Secretary-Treasurer, Henry W. Griest, Monticello.

Continue until weaning...

No substitute for mother's milk is more highly regarded than Similac for feeding the new born, twins, prematures, or infants that have suffered a digestive upset. Similac gives uniformly good results in these special cases simply *because it resembles breast milk so closely.* Normal babies thrive on it *for the same reason.*

This similarity to breast milk is definitely desirable—from birth until weaning.

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A powdered, modified milk product especially prepared for infant feeding, made from tuberculin tested cow's milk (casein modified) from which part of the butter fat has been removed and to which has been added lactose, cocoanut oil, cocoa butter, corn oil, and olive oil. Each quart of normal dilution Similac contains approximately 400 U.S.P. units of Vitamin D, and 2500 U.S.P. units of Vitamin A as a result of the addition of fish liver oil concentrate.



SIMILAC *Similar to breast milk*

Boone County Medical Society members met at the Witham Hospital, in Lebanon, on December second. The twelve members present were shown a film on "Folic Acid," following which election of officers was held.

Cass County Medical Society members elected officers at a meeting on December nineteenth at St. Joseph Hospital, in Logansport. Dr. W. R. Hickman, of Logansport, addressed the seven members present on "Periorbital Cellulitis."

Clay County Medical Society members held a meeting on December thirtieth. The seven members present were introduced to the new officers of the society.

Clinton County Medical Society members held a meeting in Frankfort, on December second. Thirteen members were present. Dr. David Stone, of Indianapolis, spoke on "Histoplasmosis vs. Pulmonary Tuberculosis." Officers for 1948 were elected.

Another meeting was held on January sixth, when Dr. Wemple Dodds, of Crawfordsville, was the guest speaker. Sixteen members and one guest were present.

Dearborn-Ohio County Medical Society members met at the Dillsboro Health Resort, in Dillsboro, on December fourth, when election of officers for 1948 was held. This was the annual guest dinner meeting, and was attended by thirty-three members and guests.

DeKalb County Medical Society members held a meeting on December seventeenth at Sacred Heart Hospital, in Garrett. Dr. Charles Weirich, of Butler, spoke on "Anaphylactic Reactions." Nine members were present.

Fayette-Franklin County Medical Society members met on December ninth at the Country Club, in Connersville, when Dr. Gordon W. Batman, of Indianapolis, spoke on "Lower Back Pain." Eighteen members were in attendance.

Fort Wayne (Allen) County Medical Society members met on December second in the Chamber of Commerce Building, when Dr. J. K. Berman, of Indianapolis, addressed the sixty members who were present on "Splenomegaly."

Another meeting was held on December sixteenth, at which fifty-three members were present. The guest speaker was Dr. H. P. Kooistra, of Grand Rapids, Michigan, whose subject was "Problems of Cancer Detection Clinic."

Grant County Medical Society members held their Christmas Party, and election of officers on December eighteenth. Forty members and guests were in attendance.

Greene County Medical Society members held a meeting at the Freeman Greene County Hospital, in Linton, on December eleventh. Sixteen members attended.

Huntington County Medical Society members held a meeting in Huntington on December second. Dr. J. Stanley Battersby, of Indianapolis, spoke on "Chest Surgery." The meeting was attended by eighteen members.

Indianapolis (Marion County) Medical Society members held a meeting at the White Cross Service Center, in Indianapolis, on November eighteenth. Dr. Lyman R. Pearson discussed "General Manifestations of Rectal Pathology"; Dr. Russell R. Hippensteel discussed "Sinistrality, Pros and Cons"; Dr. Myron H. Nourse discussed "Treatment of the Paralyzed Bladder"; and Dr. Ralph J. McQuiston discussed "The Fenestration Operation."

Another meeting was held on November twenty-fifth, at which time Dr. Ralph V. Everly discussed "Lymphatic Leukemia," Dr. Don Wood discussed "Trichinosis," and Dr. James S. McBride discussed "Surgery of the Tuberculous Lung."

Kosciusko County Medical Society members held a meeting in Warsaw, on January sixth, when eight members were present. Dr. T. S. Schuldt, of Pierceton, was appointed as full time county health officer, to become effective January 1, 1949.

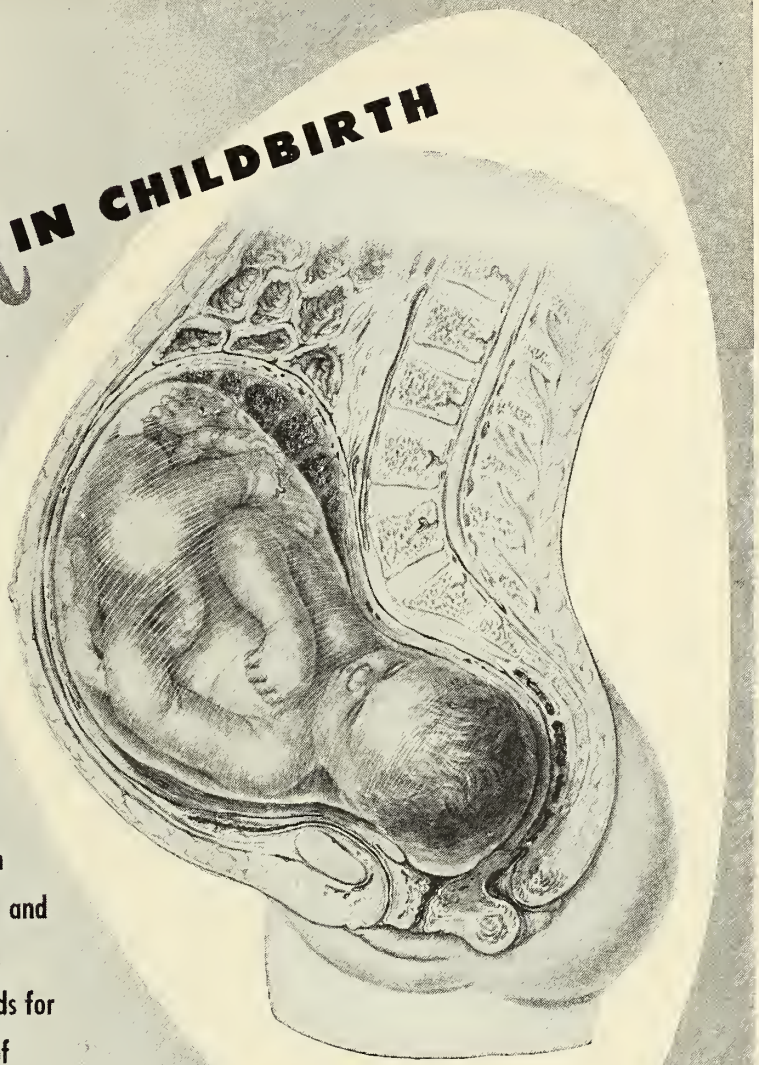
Lawrence County Medical Society members met at Dunn Memorial Hospital, in Bedford, on December third. The fourteen members present elected officers for 1948.

Noble County Medical Society members held a meeting in Albion, on December eleventh. Dr. John Morr, of Albion, spoke on "Ye Old Physicians of Indiana." Fourteen members were in attendance.

Parke-Vermillion County Medical Society members held a business meeting at the Vermillion County Hospital, in Clinton, at which ten members were present.

Another meeting was held on December seventeenth, at which Dr. Harry Brown, of Indianapolis, spoke on the treatment of burns.

Pain RELIEF IN CHILDBIRTH



One of the Simplest, Safest and Most Satisfactory Methods

Careful consideration of all the methods advocated for the relief of pain during childbirth leads to the conclusion that local infiltration anesthesia combined with Demerol and scopolamine is one of the simplest, safest and most satisfactory methods for the average woman in the hands of the average practitioner.

For detailed discussion, see Alfred C. Beck: Obstetrical Practice. Baltimore, Williams and Wilkins Co., 4th ed., 1947, page 403.

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WINTHROP STEARNS

DEMEROL®
HYDROCHLORIDE
Profound Analgesia Usually Without Respiratory Depression
Warning: May be habit forming. Narcotic blank required.

NOVOCAIN®
Dependable Local Anesthesia

DEMEROL and NOVOCAIN, trademarks reg. U. S. & Canada, brand of meperidine and procaine hydrochloride, respectively.

The businesses formerly conducted by Winthrop Chemical Company, Inc. and Frederick Stearns & Company are now owned by Winthrop-Stearns Inc.

Porter County Medical Society members met at Porter Memorial Hospital, on December thirtieth. The fourteen members present heard Dr. Phillip Franklin, of Gary, speak on psychiatry.

Rush County Medical Society members met in Rushville on December eleventh. The eight members present held a general discussion.

Tippecanoe County Medical Society members met at the Avalon Club, in LaFayette, on December ninth. Sixty-seven members were present for the business meeting and election of officers.

Vanderburgh County Medical Society members held a meeting at the McCurdy Hotel, in Evansville, on December ninth. This was a business meeting, when officers for 1948 were elected.

Wayne-Union County Medical Society members met at Reid Memorial Hospital, on December eleventh. The twenty-two members present held a business meeting and election of officers.

WOMAN'S AUXILIARY to the Indiana State Medical Association

President—Mrs. A. W. Ratcliffe, Evansville.
President-elect—Mrs. William Morrison, Kokomo.
Corresponding Secretary—Mrs. J. W. MacDonald, Evansville.
Recording Secretary—Mrs. Truman Caylor, Bluffton.
Treasurer—Mrs. Wendell Kelly, Anderson.
Press and Publicity—Mrs. F. M. Gastineau, Indianapolis.

OUR GOAL

"Every Physician's Wife An Auxiliary Member"

President's Letter:

As we approach the end of the auxiliary fiscal year, comes the time of reckoning. During the next two months dues must be paid to the treasurer and reports must be sent to chairmen. So I write this letter about "Deadlines." To most of us perhaps a deadline is the very last day we can think, "Oh, heavens, I'm supposed to have a report in today. I must do that tomorrow." Tomorrow being that day of the big bridge party, we get the report in the mail a couple of days later, with apologies to the officer or chairman. Yes, I've done it myself, so I know how it is.

On the other hand, the officer or chairman has probably given you the very last minute as a deadline. Comes the day all reports are due to her, and what happens? She undoubtedly has refused an invitation to a bridge party to get her composite report ready for national (being a very conscientious person). When she looks over her material, she finds only half has arrived. So she quietly develops a few gray hairs and thinks, "Oh, well (or worse), I might as well have played bridge, I can't write the report anyway." For a few more days she anxiously watches the mail, sending out cards or letters, or even wires, as reminders. Finally, after about two weeks and considerable wear and tear on nerves, she sits down and writes out her report, still without any word from at least two auxiliaries.

Please, friends, spare us this year! Help us meet our own deadlines by observing yours.

Rebecca Ratcliffe, President.

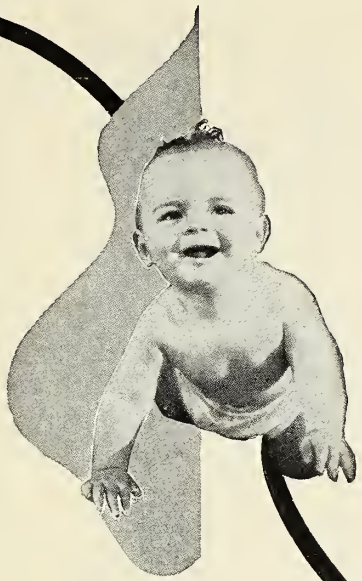
Allen County

The next meeting of the Allen County Medical Auxiliary will be a dessert bridge, on February third, at Fairfield Manor. Mrs. Robert W. Wilkins will be chairman. On March thirtieth the auxiliary will meet with the Medical Society for dinner at the Fort Wayne Country Club.

Wells County

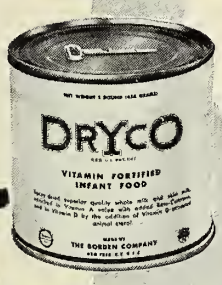
Mrs. Allen Nickel and Mrs. Richard Yoder will be hostesses for the dinner meeting of the Wells County Medical Auxiliary, to be held at the Country Club, February sixteenth. Election of officers will be held at this time.

On March fifteenth, Mrs. Robert Johnston and Mrs. Tom Dorrance will be hostesses at the dinner meeting at the Country Club. Miss Helen Roe will present the program.



*"In the rapidly growing infant, as much as one third of the protein of the food may be retained for building new tissues."**

ACCEPTED COUNCIL ON FOODS AND NUTRITION AMERICAN MEDICAL ASSOCIATION



• Nutritional authorities warn that "the possibility of protein deficiency in the diets of children has received some, but insufficient, attention" . . . and that children "with normal values are the exception rather than the rule."**

• Many progressive pediatricians, in prescribing formulas, standardize on the high-protein infant food, DRYCO— since it represents such a rich source of *all* the essential amino acids. DRYCO is also characterized by a high-mineral, low-fat and intermediate carbohydrate content—with more than adequate vitamins A, B_1, B_2 and D. It is quickly soluble in cold or warm water, and may be used with or without added carbohydrates. Special processing facilitates digestion by assuring soft curd formation in the stomach.

*BOGERT, L. J.: *Nutrition and Physical Fitness, 4th edition, 1943, Chapter IX, p. 22.*
**A.M.A.: *Handbook of Nutrition, 1943, p. 360.*

BORDEN'S PRESCRIPTION PRODUCTS DIVISION
350 MADISON AVENUE, NEW YORK 17, N. Y.

DRYCO is made from spray-dried, pasteurized, superior quality whole milk and skim milk. Provides 2500 U.S.P. units Vitamin A and 400 U.S.P. units Vitamin D per reconstituted quart. Supplies 31½ calories per tablespoon. Available at all drug stores in 1 and 2½ lb. cans.

DRYCO

the "Custom Formula" high protein infant food

Books

Books received are acknowledged in this column, and such acknowledgment must be regarded as a sufficient return for the courtesy of the sender. Selections will be made for more extensive review in the interests of our readers and as space permits. Books listed in this department are not available for lending. Any information concerning them will be supplied on request.

* * *

PRACTICAL X-RAY TREATMENT: By Arthur W. Erskine, M.D., 155 pages. Cloth. The Bruce Publishing Company, Saint Paul and Minneapolis, 1947.

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PHARMACOLOGY THERAPEUTICS AND PRESCRIPTION WRITING: By Walter A. Bastedo, M.D., Consulting Physician, St. Luke's Hospital, New York, St. Vincent's Hospital, Staten Island, and the Staten Island Hospital; Member of Revision Committee, U. S. Pharmacopoeia. 840 pages, with 82 illustrations. Price $8.50. Cloth. W. B. Saunders Company, Philadelphia, 1947.

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RYPINS' MEDICAL LICENSURE EXAMINATIONS (Topical Summaries, Questions and Answers): By Walter L. Bierring, M.D., Former Member, National Board of Medical Examiners, American Board of Internal Medicine, Iowa State Board of Medical Examiners; Professor Emeritus, Theory and Practice of Medicine, State University of Iowa; Secretary, Federation of State Medical Boards of the United States. 690 pages. Price $6.00. Cloth. J. B. Lippincott Company, Philadelphia, 1947.

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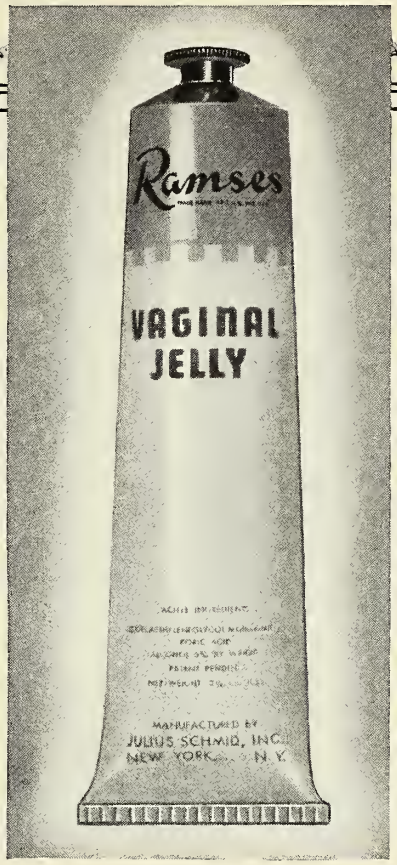
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LABORATORY MANUAL OF MICROBIOLOGY FOR NURSES. By Elizabeth S. Gill, R. N., Instructor in Nursing, Department of Nursing, College of Physicians and Surgeons, Columbia University, New York, and James T. Culbertson, Ph.D., Professor of Bacteriology and Parasitology, University of Arkansas School of Medicine, Little Rock, Arkansas. 116 pages. Paper. Price $1.50. G. P. Putnam's Sons, New York, 1947.

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MONTHLY REPORT—NOVEMBER 1947

Diseases	Nov. 1947	Oct. 1947	Sept. 1947	Nov. 1946	Nov. 1945
Brucellosis	11	10	6	27	4
Chickenpox	311	95	10	424	159
Diphtheria	73	42	17	46	62
Dysentery (Unspecified)	6	..	2	..	1
Encephalitis:					
Infectious	2	2	8	1	2
Noninfectious	1	..	..	7	..
Erysipelas	3	2	..	4	4
Conjunctivitis:					
Kerato	69	6	..	..	..
Catarrhal	1	..	..	..	..
Impetigo	13	21	11	6	13
Influenza	53	46	53	23	410
Malaria	3	1	..	8	10
Measles	51	24	11	44	18
Meningitis:					
Meningococcic	3	1	1	..	..
Pneumococcic	1	..	..	..	..
Unspecified	8	5	4	6	12
Meningococcemia	1	..	..	..	..
Mumps	75	19	9	45	47
Paratyphoid Fever	1	2	2	..	1
Pertussis	274	175	170	109	105
Pneumonia	42	48	27	29	9
Poliomyelitis	19	42	96	65	13
Rabies: Animal	29	14	..	..	..
Rubella	8	6	1	3	1
Scabies	3	..	..	..	..
Scarlet Fever	252	109	50	280	260
Septic Sore Throat	8	9	9	7	13
Tetanus	1	1	2	..	3
Tinea Capitis	51	65	6	..	..
Tularemia	5	1	1	14	2
Typhoid Fever	7	3	18	6	7
Vincent's Angina	2	5	..	5	2
Tuberculosis:					
Pulmonary	223	170	225	252	285
Other Forms	23	9	9	10	23

MONTHLY REPORT—DECEMBER, 1947

Diseases	Dec. 1947	Nov. 1947	Oct. 1947	Dec. 1946	Dec. 1945
Brucellosis	10	11	10	11	3
Chickenpox	464	311	95	455	300
Conjunctivitis	3	69	13	0	3
Infectious Diarrhea	1	0	0	0	0
Dysentery	9	6	1	2	1
Diphtheria	49	73	43	62	50
Encephalitis	2	2	2	2	0
Erysipelas	2	3	2	4	1
Food Poisoning	3	0	0	1	3
Impetigo	2	13	21	10	9
Influenza	33	53	46	21	4290
Malaria	2	3	1	14	4
Measles	217	51	24	36	40
Meningitis, Cerebrospinal	9	8	5	9	13
Meningitis, Meningococcic	2	3	1	0	0
Meningitis, Influenzal	2	0	1	0	0
Mumps	106	75	19	36	30
Pneumonia	48	42	48	36	30
Poliomyelitis	17	19	42	14	7
Rabies, Animal	29	29	14	0	0
Rubella	5	8	5	1	1
Scarlet Fever	227	252	109	281	292
Septic Sore Throat	11	8	9	16	9
Smallpox	1	0	0	5	4
Tinea Capitis	20	51	65	0	0
Tularemia	9	5	1	47	0
Typhoid Fever	3	7	3	4	2
Typhus Fever	1	0	0	0	0
Vincent's Angina	1	2	5	5	0
Whooping Cough	180	274	175	99	92
Tuberculosis, Pulmonary	146	223	170	114	380
Tuberculosis, Other Forms	13	23	9	2	57

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THE MEDICAL MANAGEMENT OF THYROTOXICOSIS*

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MADISON, WISCONSIN

FOR many years subtotal thyroidectomy has been the therapy of election in the management of thyrotoxicosis. Yet its unphysiologic nature has been appreciated by most clinicians. With the growth of the knowledge of the physiology and chemistry of the thyroid gland operative preferment became more and more vulnerable. Particularly significant were the established interrelationships among the endocrine glands. The pituitary-thyroid interdependence supplied the clues to a number of obscure clinical aspects of thyrotoxicosis and in turn cast serious doubt upon the surgical attack. From a technical standpoint subtotal thyroidectomy has never been an exact procedure. The extremities of its inexactitude range from postoperative myxedema to relapses. In a well controlled study Preston and Thompson[1] reported that 17.5 per cent of patients with diffuse toxic goiter and 2.4 per cent of those with nodular toxic goiter, treated by subtotal thyroidectomy, experienced persistence or recurrence of thyrotoxicosis. Hence the medical profession has been receptive to therapeutic suggestions stemming from sound physiologic concepts and supported by experimental evidence.



The evolution of an appreciation of the role of iodine in the metabolism of the thyroid gland is one of the most fascinating pages in medical history. Its more direct thread may be traced from Baumann's determination of the high concentration of this element in thyroid extract (1896) to the current significant studies of its intimate course with radioactive isotopes. The avidity of the thyroid gland for iodine is witnessed by its content of 20 per cent of the entire body's supply. This circumstance has lead to the use of radioactive iodine (I^{127} and I^{131} especially) in the study of its physiology. Utilizing the ingenious technique of tissue autographs, the Columbus group has demonstrated the deposition of radioactive iodine in the colloid of the thyroid follicle.[2] They have also shown conclusively that adenomata of the thyroid gland are less active than surrounding normal parenchyma.[3] Interesting was the evidence that, after entering the thyroid, iodine is rapidly converted to diiodotyrosine, from two molecules of which thyroxin is formed. This thyroid hormone exists in the acini in the form of thyroglobulin. The proteolytic action of enzymes probably explains

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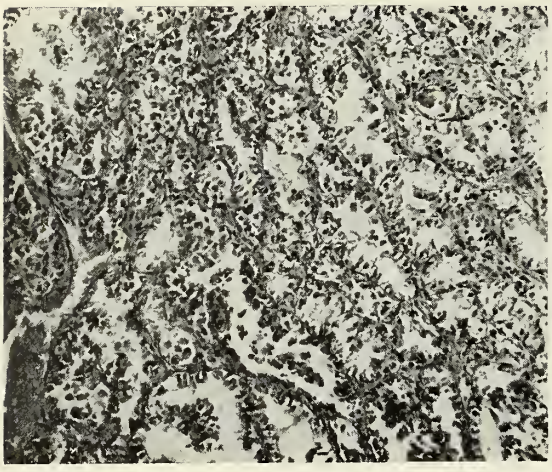
† From the Department of Medicine, University of Wisconsin, Medical School.

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[2] Leblond, C. P., Fertman, M. B., Puppel, I. D. and Curtis, G. M.: Radioactive Autography in Studies of Human Goitrous Thyroid Glands. Arch. Path. 41:510, 1946.

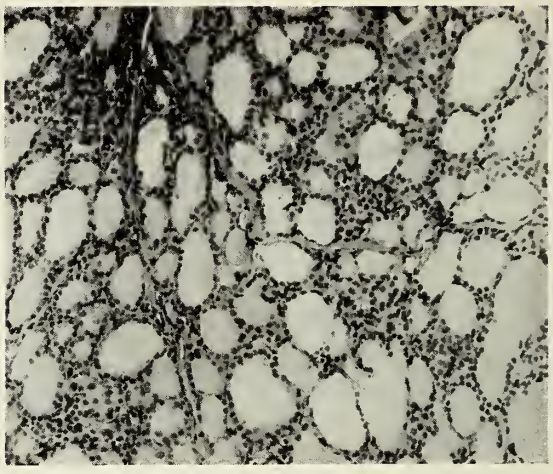
[3] Leblond, C. P., Puppel, I. D., Riley, E., Radicke, M. and Curtis, G. M.: Radioiodine and Iodine Fractionation Studies of Human Goitrous Thyroids. J. Biol. Chem. 162:275, 1946.

Figure 1



Histologic appearance of the thyroid gland of an untreated patient with thyrotoxicosis (diffuse toxic goiter).

Figure 2



Histologic appearance of the thyroid gland of a thyrotoxic subject after iodine therapy.

the release of the active hormone from the globulin upon demand.

The clinical use of iodine in diseases of the thyroid gland has the virtue of antiquity; but to Marine and his fellows belongs the credit for its brilliant success in the control of endemic goiter. Its earliest recorded application to the treatment of toxic states of the thyroid gland was fortuitous. Apparently iodine was erroneously substituted for digitalis by Trousseau in the treatment of a patient with thyrotoxicosis. He remarked unexpected improvement. Subsequently desultory trials of this element were made; but the credit for popularizing its use in thyrotoxicosis should be granted to Plummer.[4] His contention of a differentiation of Graves' disease (diffuse toxic goiter) and toxic adenoma of the thyroid gland (nodular toxic goiter) by the incomplete nature of the internal secretion of the former, which is corrected by the administration of iodine, proved incorrect. With minor variations the clinical response of both toxic states to iodine has been comparable. Iodides are transformed to iodine by an oxidase in the thyroid. The manner of action of this element in thyrotoxicosis has not been clearly elucidated. Salter and Lerman[5] held that iodine serves to stimulate the colloid storage form of thyroid protein. Iodine may further act by inhibiting the proteolysis of thyroglobulin. Although iodine is essential for the formation of thyroxine, under certain conditions inactivation of the thyrotropic hormone may result from its use. Still further explanations have been offered. Among them the mechanical theory is widely accepted. By this concept iodine leads to an increase in the production of colloid, which in turn, by increasing the intra-acinal pressure on the lining epithelium, reduces the leakage of the hormone into the blood.

The histological changes incident to iodine therapy in thyrotoxicosis are highly significant (Figure 1). The parenchymal hyperplasia gives way to colloid deposition and the columnar epithelial redundancy is replaced by the normal single layer of functioning cuboidal cells. Lymphocytic infiltration into the supporting stroma may constitute the sole relic of the earlier hyperplastic process at one stage of the remission from iodine (Figure 2).

The usual preparation of iodine used in this relation is Lugol's solution (compound solution of iodine). Any iodide may be substituted. The ordinary dose of Lugol's solution is 0.3 cc. (5 minims) three times a day. This dosage represents many times the actual need in iodine content. Experience has proved that the remission in the thyrotoxic course gained by iodine is transitory. Furthermore, the responsivity of the subject to subsequent courses of iodine may be much less dramatic than the initial. Hence iodine has come to be used in the preparation for surgery, and its contribution to the smoother, safer operative and postoperative course has been a great boon to the patient and to the physician. Thyroid crises are rare occurrences in this day and the mortality from subtotal thyroidectomy has been reduced to an almost negligible level, in no small measure dependent upon iodine support. Other medical aids in the same direction include rest, diet, sedation and appropriate cardiac medication. One detail in the improvement of the circulatory status deserves particular attention. Although auricular fibrillation very commonly resolves itself after subtotal thyroidectomy, the surgical risk may be materially improved by the restoration of normal sinus

[4] Plummer, H. S.: Results of Administering Iodin to Patients With Exophthalmic Goiter. J.A.M.A. 80:1955, 1923.

[5] Salter, W. T. and Lerman, J.: Genesis of Thyroid Protein: Clinical Assays of Artificial Thyroid Protein in Human Myxedema. Endocrinology, 20:801, 1936.

rhythm preoperatively. To this end quinidine sulfate is given after the following schedule:

(a) 130 mgm. (2 grains), repeated in 2 hours, as a test of idiosyncrasy to quinine.

(b) 260 mgm. (4 grains), every 2 hours, day and night, until normal rhythm is restored. If this advantage has not been gained in 36 hours, further trial is usually unavailing.

(c) Maintenance dosage is established by reducing the individual dose and then by lengthening the interval. In a majority of patients quinidine may be completely withdrawn after the auricular fibrillation is controlled; but in certain instances the drug must be continued until the thyrotoxicosis has been ameliorated by surgery.

In the search for a nonsurgical method of control of thyroid overactivity various agents with reputed antidotal action against thyroxin have been subjected to experimental and clinical study. Among these, fluorine has received especial notice. Contrary to the earlier clinical and experimental reports, Seevers and Braun[6] proved that sodium fluoride did not reduce the basal metabolic rate nor counteract the pharmacologic action of thyroid in experimental animals. Destructive agents, such as injections of boiling water and x-ray exposures, have been employed in combatting thyrotoxicosis. Means and Holmes[7] reported 63 per cent of 44 patients with thyrotoxicosis improved by x-ray therapy. In this very limited group 7 patients (from the improved group) suffered relapses. The experience at the State of Wisconsin General Hospital would make these results seem unduly optimistic, although by common consent the choice of patients for x-ray therapy has not afforded a fair comparison with surgical results. In general they have included too high a number of poor surgical risks.

With the advent of radioactive iodine its application to the therapy of thyrotoxicosis was natural. Keating[8] has written a comprehensive survey of the evolution of this phase of the subject. Armed with the knowledge of the rapid localization of iodine in the hyperplastic thyroid gland (80 per cent of 2 mgm. or less within 2 minutes)[9], clinical trials of this radioactive agent were soon forthcoming. Hamilton and Lawrence[10] noted the almost complete destruction of the thyroid parenchyma after the administration of I^{131} (with half life of 8 days) to experimental animals. Cautiously adjusted doses to 3 patients with hyperthyroidism induced clinical remissions without adverse symptoms in 4 to 6 weeks. Four and one-half months later 2 of these patients were entirely well. The third required another small dose of radioactive iodine. Hertz and Roberts[11] reported similar results in 10 thyrotoxic patients. In another communication[12] these workers indicated an interesting ability to differentiate two forms of Graves' disease. When 2 mgm. of radioactive iodine (I^{131}) is given to patients with the ophthalmopathic type of thyrotoxicosis much greater urinary excretion and lower thyroid storage occur than in the classical Graves' type. Seidlin, Marinelli and Oshry[13] have further extended its clinical application to the therapy of carcinoma of the thyroid gland. Localization of I^{130} (with half life of 12.6 hours) and I^{131} showed amazing uptake of these labeled elements in the metastases from an adenocarcinoma of the thyroid to the lungs, right femur, rib, ileum and skull. The clinical improvement was substantiated by roentgenographic evidence of an arrest of the process.

Obviously time and extended experience will be required to fix the appropriate dosage of radioactive iodine. By reason of its longer half life I^{131} has become the preferred isotope. Chapman and Evans[14] have given especial attention to the effective dose. From levels of 5 millicuries in 1941 the dosage of radioactive iodine had been stepped to 14.5 millicuries in 1943. The total dose in a series of 22 thyrotoxic patients ranged from 27 to 52 millicuries. Fourteen of the 22 subjects showed a good response. Radiation reactions developed in 6 patients. Four demonstrated unmistakable evidence of myxedema. Histologic fibrosis of the thyroid gland occurred in 2 studied after the administration of I^{131}. In essence they concluded that radioactive iodine by reason of its local release of beta rays in the thyroid substance constitutes a form of "internal radiation" of the hyperplastic gland. In the present state of knowledge radioactive iodine has a limited field of application in thyrotoxicosis. In the immediate future, serious complications which deny the trial of the approved methods of treatment will doubtless constitute the largest group. The unavailability or the failure of other forms of therapy will establish a further indication for the use of I^{131}. With

[6] Seevers, M. H. and Braun, H. A.: Effects of Sodium Fluoride upon Experimental Thyroid Poisoning. Proc. Soc. Exp. Biol. and Med. 33:228, 1935.

[7] Means, J. H. and Holmes, G. W.: Further Observations on the Roentgen Ray Treatment of Toxic Goiter. Arch. Int. Med. 31:303 (March) 1923.

[8] Keating, F. R.: The Medical Use of Radioactive Isotopes. II. Radioiodine and the Thyroid, Am. J. Med. Sc. 213:628 (May) 1947.

[9] Hertz, S., Roberts, A. and Salter, W. T.: Radioactive Iodine as an Indicator in Thyroid Physiology. IV. Metabolism of Iodine in Graves' Disease. J. Clin. Inves. 21:25, 1942.

[10] Hamilton, J. G. and Lawrence, J. H.: Recent Clinical Developments in the Therapeutic Application of Radio-Phosphorus and Radio-Iodine, J. Clin. Inves. 21:624, 1942.

[11] Hertz, S. and Roberts, A.: Application of Radioactive Iodine in Therapy of Graves' Disease. J. Clin. Inves. 21:624, 1942.

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[13] Seidlin, S. M., Marinelli, L. D. and Oshry, E.: Radioactive Iodine Therapy, Effect on Functioning Metastases of Adenocarcinoma of the Thyroid. J.A.M.A. 132:838 (Dec. 7) 1946.

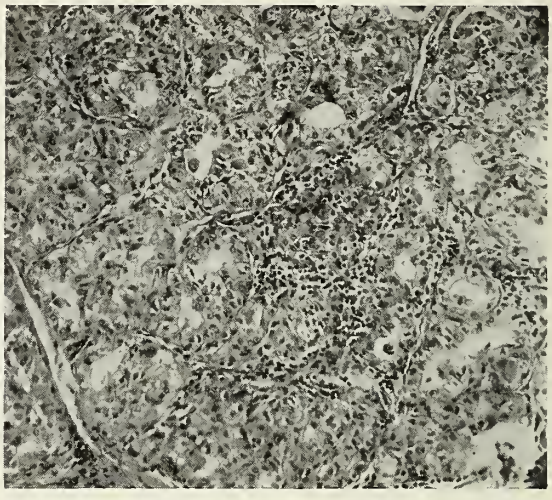
[14] Chapman, E. M. and Evans, R. D.: Radioactive Iodine in Hyperthyroidism. J.A.M.A. 131:86 (May 11) 1946.

extending familiarity this agent may readily take a primary, rather than a supporting, place in the therapeutic armamentarium for thyrotoxicosis.

The experimental evidence of the goitrogenous effect of cabbage, cauliflower and Brussels sprouts in rabbits and rats led Marine and his associates to the discovery of the responsibility of cyanogen compounds. The later use of potassium thiocyanate for the control of arterial hypertension induced isolated instances of thyroid hyperplasia. Rawson, Hertz and Means[15] reported a patient who, after a year of thiocyanate treatment for hypertension, developed a goiter and showed a basal metabolic rate of minus 17. Sections of the gland showed marked vascularity and hyperplasia. Indeed, its degree of cytologic change suggested a papillary cystadenoma. Upon the withdrawal of the drug all clinical evidences of hypothyroidism disappeared and the basal metabolic rate returned to normal. In 1941 MacKenzie, MacKenzie and McCollum[16] found that when rats were given sulfaguanidine to control intestinal infections, they developed thyroid hypertrophy attended by a lowered basal metabolic rate. These results were not combatted by para-aminobenzoic acid. The low basal metabolism responded to thyroxin. Then Kennedy[17] established the goitrogenous action of allyl and diethyl thiourea. His failure to duplicate these results with acetyl thiourea and thio-acetamide probably depended upon inadequate dosage.[18] Kennedy observed the changes in the pars anterior of the hypophysis that are ordinarily associated with thyroidectomy. The MacKenzies[18] confirmed all essential details of Kennedy's fundamental studies. Thiourea, as well as the sulfonamides, led to a heightening of the thyroid epithelium which changed from a cuboidal to a columnar form. No antidotal protection against this action was demonstrated in inositol, liver powder, fresh liver, para-aminobenzoic acid, cysteine, cystine, vitamin C or calcium pentothenate. Iodine afforded no antagonism, but complete protection was found in thyroidea sicca and thyroxin. Interestingly, hypophysectomy prevented hyperplasia of the thyroid gland upon later sulfonamide or thiourea administration. Conversely, after thyroidectomy sulfaguanidine induced no decrease in the basal metabolism, nor did it control the effect of thyroxin.

The MacKenzies felt that their results could be explained by a depression of the functional activity of the thyroid gland. With a decrease in the production of thyroxin the normal inhibition to the

Figure 3



Histologic appearance of the thyroid gland of a thyrotoxic subject after thiouracil therapy.

activity of the thyrotropic function of the anterior lobe of the hypophysis was released. With such a release came the response in thyroid hyperplasia. Williams, Weinglass and Kay[19] found thyrotropic hormone with thiouracil much more goitrogenic than thiouracil alone. Thyrotropin decreased the storage of thiouracil. Potassium iodide increased this function. In a careful study of calcium, phosphorus, nitrogen and creatin metabolism of a patient with hyperthyroidism under thiouracil, Sloan and Shorr[20] found a regular return of each of these processes to normal. On this basis they supported the physiological order of the therapy. Many histologic studies of the thyroid gland after thiouracil have confirmed the experimental observations.[18] Shirer and Cohen[21] sounded a note of caution in thiouracil therapy. From the histologic standpoint the extreme degree of hyperplasia with degeneration was scarcely desirable. They also noted the occasional spotty distribution of thiouracil action on the thyroid (Figure 3).

The clinical trial of the antithyroid drugs was not long deferred. In 1943 Astwood[22] made the first report of the effect of thiourea and thiouracil in the treatment of thyrotoxicosis. After a lag of one to two weeks, satisfactory remissions were induced in all of this group of 8 patients. Conservatively he commented, "These results are con-

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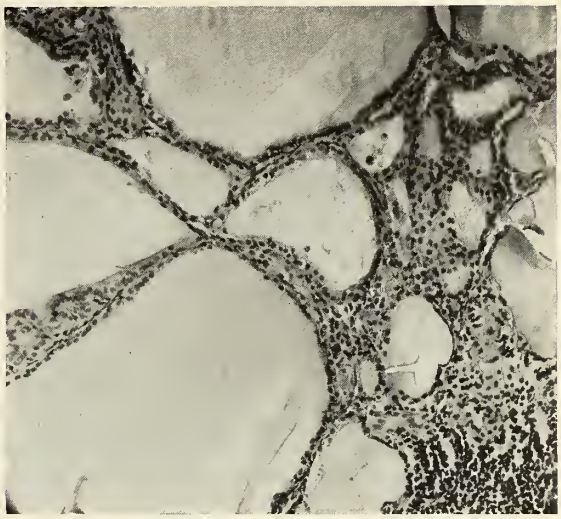
[21] Shirer, J. W. and Cohen, M.: The Effects of Thiouracil on the Thyroid Gland. Ann. Int. Med. 23:790, 1945.

[22] Astwood, E. B.: Treatment of Hyperthyroidism with Thiourea and Thiouracil. J.A.M.A. 122:78 (May 8) 1943.

sidered to be further evidence that thioureylene derivatives inhibit the formation of thyroid hormone." Williams and Clute[23] reported the results of thiouracil therapy in 72 hyperthyroid subjects. Thirty of this group had maintained normal basal metabolic level for more than 4 months and 16 for more than 6 months under therapy. In 4 patients studied, the protein-bound iodine returned to normal before the restoration of basal metabolic equilibrium (2 within 2 weeks and 2 within 4 weeks). Barr and Shorr[24] observed that thiouracil induced remissions in 87 of 100 patients with thyrotoxicosis. Special studies confirmed earlier results[20] in nitrogen, calcium, phosphorus and creatine metabolism. Complete medical success in the maintenance of remissions was achieved in 73, and 37 of this number sustained the advantage for 2 to 16½ months after the withdrawal of thiouracil. Gabrilove, Kert and Soffer,[25] among others, have added their clinical experience to enrich the literature on the subject. The dose of thiouracil first recommended was 1 gram (15 grains) a day. The customary formula[23] today is 0.2 gram (3 grains) 3 times a day for 2 weeks; then 0.2 gram (3 grains) twice a day until the basal metabolic rate becomes normal; then 0.1 gram (1½ grains) twice a day until this normal level has been maintained for several weeks; then 0.1 gram (1½ grains) daily. The time of ultimate withdrawal of the drug will depend upon clinical judgment. Williams, Asper, Rogers, Myers and Lloyd[26] have found that the shortest period of administration (few months) is indicated in patients with small goiters without bruit. Especially is this true if the general condition of the patient and the basal metabolic rate have responded promptly to thiouracil. Conversely, long periods of therapy (upward of 9 months) are advisable in patients with larger goiter, bruits over the thyroid and increasing malignant exophthalmos. These guides have added force if more than 0.050 gram of thiouracil is required to maintain equilibrium. Relapses upon discontinuance of thiouracil occur relatively promptly. Twenty per cent in their series appeared within 2 months; 88 per cent within 5 months.

While the best results would seem to occur in younger women with small goiter, mildly toxic,[26] there is no arbitrary rule that excludes the trial of thiouracil. Contrary to earlier clinical judgment, patients with nodular toxic goiter may respond brilliantly to this agent. Prior administration of iodine may seriously delay and impair the action of thiouracil; but the most prompt and sustained result that has been encountered in the use of this drug in the State of Wisconsin General Hospital was an exception to the rule. This thyrotoxic patient had received iodine for 3 months before entering the hospital. Yet within 7 days after the initiation of thiouracil the earliest objective evidences of therapeutic effect became apparent in placidity, lowered pulse rate, and falling basal metabolic rate. Where surgery is contemplated, iodine has been added to thiouracil 10 to 14 days before the scheduled operation, in an attempt to reduce the vascularity of the thyroid gland[27] (Figure 4). Penick[28] outlined a similar objective in his use of thyroid extract with thiouracil in preoperative preparation for subtotal thyroidectomy. Experiments on the rat led Goldsmith, Gordon and Charipper[29] to the conclusion that thiourea induced activation and hypertrophy of the thyroid gland with retarded growth of the offspring. There were no births of any rats under treatment. On the other hand, Easton[30] treated two pregnant women with thiouracil. One of these women, who was continued on the drug to parturition, bore a baby with a large thyroid but with no other anomaly. Williams and his associates[26] advise the

FIGURE 4



Histologic appearance of the thyroid gland of a thyrotoxic patient after combined thiouracil-iodine therapy.

[23] Williams, R. H. and Clute, H. M.: Thiouracil in the Treatment of Thyrotoxicosis. New England J. Med. 230:657 (June 1) 1944.

[24] Barr, D. P. and Shorr, E.: Observations on the Treatment of Thyrotoxicosis. Ann. Int. Med. 23:754, 1945.

[25] Gabrilove, J. L., Kert, M. J. and Soffer, L. J.: The Use of Thiouracil in the Treatment of Patients with Hyperthyroidism. Ann. Int. Med. 23:537, 1945.

[26] Williams, R. H., Asper, S. P., Jr., Rogers, W. F., Jr., Myers, J. D. and Lloyd, C. W.: Persistence of Remissions after Cessation of Thiouracil Therapy, New England J. Med. 236:737 (May 15) 1947.

[27] Rawson, R. W., Moore, F. D., Peacock, W., Means, J. H., Cope, O. and Riddell, C.: Effect of Iodine on the Thyroid Gland in Graves' Disease when given in Conjunction with Thiouracil. J. Clin. Inves. 24:869, 1945.

[28] Penick, R. M., Jr.: Use of Thyroid Extract with Thiouracil in the Preparation of the Thyrotoxic Patient, a Preliminary Report. Ann. Surg., 125:582 (May) 1947.

[29] Goldsmith, E. D., Gordon, A. S. and Charipper, H. A.: An Analysis of the Effects of Continued Thiourea Treatment in Pregnancy and on the Development of the Offspring in the Rat. Am. J. Obst. and Gyn. 49:197, 1945.

[30] Easton, J. C.: Treatment of Thyrotoxicosis with Thiouracil. Lancet, 1:171 (Feb. 10) 1945.

concomitant use of potassium iodide for mothers receiving thiouracil (in its smallest effective dose). Furthermore, such a mother should not nurse the baby, since thiouracil is secreted in high concentration in the milk.

The adverse manifestations of thiouracil are diverse.[31] Cutaneous eruptions attributed to this agent have included morbilliform rashes, urticaria, erythema and papules. Edema, salivary gland enlargement and lymphadenopathy have been encountered. Drug fever is an occasional expression of such an idosyncrasy. Nausea and vomiting are not infrequent in patients taking this drug. Hepatitis is a rare result of its use. The most serious untoward reaction is neutropenia. In a careful survey of this phase of the subject Beierwaltes and Sturgis[32] reviewed 7 fatal cases of agranulocytosis in 100 treated subjects, whereas Gabrilove and his fellows[25] reported 11 agranulocytic reactions among 54 patients treated with thiouracil. Sikkema, Thewlis and Meyer,[33] in a review of the subject, established a 2 per cent incidence. An added significance is given to this figure by the reported mortality of 25 per cent. From their study of the bone marrow they concluded that agranulocytosis of thiouracil origin resulted from "an extreme reduction of granulocyte precursors and later of the more mature forms."

Eternal vigilance is the best protection against grave consequences from agranulocytosis. Periodic counts of the leukocytes and their distribution (2 or 3 times a week) should be made throughout the first 4 months of thiouracil treatment. Since the decline may be precipitous, unusual caution is recommended. When the total leukocytes fall below 5,000, and the neutrophils below 50 per cent, a premonitory increase in monocytes may occur. If the trend in daily counts after this point be downward, immediate withdrawal is advised. *Do not await agranulocytosis.* Penicillin offers the logical barrier to bacterial invasion until the natural mobile resistance of the neutrophils is restored by medullary activity. Morton,[34] who has carefully reviewed this subject, recommends 500,000 units daily. General experience gives 50,000 units every 2 hours, day and night (600,000 units a day), as a reasonable requirement. In addition, aerosols of penicillin may be used. Sikkema, Thewlis and Meyer[33] found penicillin, crude liver extract, pentnucleotide, folic acid, yellow bone marrow and small blood transfusions unavailing in one instance in a singularly susceptible subject whose course of thyrotoxicosis was complicated by pregnancy.

In the search for antithyroid drugs with less danger of neutropenic reactions than thiouracil, propylthiouracil seemed to answer the indications. In a series of 100 thyrotoxic patients treated with this agent Astwood and Vander Laan[35] did not encounter a single instance of agranulocytosis. Taylor[36] reported a similar experience in 26 patients so treated. Although Beierwaltes and Sturgis[37] escaped serious adverse reactions in their trial of propylthiouracil in 42 patients, they sounded a word of caution in the probable dependence of the apparent advantage upon the lower dosage of the new preparation. They cite in support of this position Bartels' report of 3 instances of agranulocytosis attributed to propylthiouracil. The originally recommended doses in the trial studies of this preparation were 25 mgm. (½ grain) at 8 to 12 hour intervals. Astwood and Vander Laan[35] found that an initial daily dosage of 100 to 150 mgm. sufficed. With the control of thyroid toxicity they reduced the dose to 100 or to 50 mgm. daily. Maintenance requirements were as little as 25 to 50 mgm. Current opinion favors higher dosage.

In 5 patients intolerant to thiouracil and 1 reacting adversely to thiobarbital Astwood and Vander Laan[35] reported the use of propylthiouracil with impunity. Furthermore, urticaria and headache were the only untoward reactions encountered in their patients. Beierwaltes and Sturgis[37] added drowsiness and acneform dermatitis. In one severely thyrotoxic patient seen in consultation with Dr. H. M. Kay, Madison, a characteristic drug fever resulted from the use of propylthiouracil. The withdrawal of the drug led to its prompt subsidence.

The increasing effort to improve the clinical efficacy of antithyroid therapy led Lawson and Rimington[38] to the interesting observation that all effective compounds contained the grouping $> N — CS — N <$ and acted by the prevention of the accumulation of iodine, and hence the synthesis of thyroxin by the thyroid gland. Since ergothioneine, a normal constituent of the blood, contains this radical, they submitted it to experimental study. Upon subcutaneous injection in rats a goitrogenic effect comparable to oral thiouracil oc-

[31] Van Winkle, W., Hardy, S. M., Hazel, G. R., Hines, D. C., Newcomer, H. S., Sharp, E. A. and Sisk, W. N.: The Clinical Toxicity of Thiouracil, a Survey of 5,745 cases. J.A.M.A. 130:343, 1946.

[32] Beierwaltes, W. H. and Sturgis, C. C.: Complications Following Administration of Thiouracil. Am. J. Med. Sc. 212:513 (Nov.) 1946.

[33] Sikkema, S. H., Thewlis, E. W. and Meyer, O. O.: Sternal Marrow Studies in Thyrotoxicosis Treated with Thiouracil and Review of Literature Regarding Thiouracil Effects on the Blood. J. Hematol., 1:411 (Sept.) 1946.

[34] Morton, J. H.: Agranulocytosis caused by Thiouracil, a Review of Fifty-nine Cases in the Literature and Report of Two Additional Cases. Am. J. Med. 2:53 (Jan.) 1947.

[35] Astwood, E. B. and Vander Laan, W. P.: Treatment of Hyperthyroidism with Propylthiouracil. Ann. Int. Med. 25:773 (Nov.) 1946.

[36] Taylor, S. G., III: Treatment of Toxic Goiter with Propyl-thiouracil. Proc. Int. Med., Chicago, 16:396 (May 15) 1947.

[37] Beierwaltes, W. H. and Sturgis, C. S.: Thiouracil and Propyl-thiouracil: A Comparative Clinical Study, J. Lab. and Clin. Med. 32:392 (April) 1947.

[38] Lawson, A. and Rimington, C.: Antithyroid Activity of Ergothioneine. Lancet, 1:586 (May 3) 1947.

curred. Obviously this observation opens an entirely fresh field of natural antithyroid substances.

In brief, the medical management of thyrotoxicosis has been broadened upon sound physiological and pharmacological grounds in recent years. Iodine has come into general use largely as a preparatory measure to surgery. Radioactive iodine offers some promise of independent therapeutic value, but much critical study is required to extend this area of application. Antithyroid drugs promise an entirely new approach to the problem. While they have been effective in controlling thyrotoxicosis in preparation for surgery, an extending field of usefulness as a sole method of treatment is developing. Propylthiouracil, with its lessened toxicity, is rapidly displacing thiouracil in clinical favor. Newer antithyroid drugs may be anticipated.[39] The door to the exclusive medical management of thyrotoxicosis has been opened.

[39] Williams, R. H.: Antithyroid Drugs: III. Comparison of Results of Newer Forms of Treatment of Thyrotoxicosis. Arch. Int. Med. 80:11 (July) 1947.

NONTUBERCULOUS PULMONARY DISEASES; THEIR RELATION TO BRONCHIAL OBSTRUCTION‡

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Bronchial obstruction is a fundamental pathological process which plays an extensive, variable role in pulmonary pathology. Its influence on the lung is usually determined more specifically by the location of the lesion and the degree to which the bronchus is obstructed than by the etiology of the process which has produced the obstruction. The effects of an obstruction of a bronchus may be widespread, and not limited to the lung distal to the obstruction. Gross, significant changes in intrathoracic pressure, circulatory changes, extensive suppurative processes and other physiologic and pathologic processes result. It is the purpose of this paper to discuss principally the mechanics of bronchial obstruction and the signs and symptoms which it produces. The disease entities which may be responsible for the obstructions, as well as those which are produced by them, will serve as illustrations.



A division of the lesions responsible for bronchial obstructions into intrabronchial, endobronchial and extrabronchial groups serves as an etiologic classification. Indirectly, the age of the patient must likewise be considered a factor influencing the pathological condition produced by bronchial obstruction. The small caliber of the trachea and bronchi of infants is responsible for extensive pulmonary changes produced by lesions which would be insignificant in the air passages of a child or an adult. Similarly, the very soft nature of the cartilage of the trachea and bronchi of infants permits easy compression of the airway which would be impossible in the more rigid bronchi of adults. The fundamental mechanics of the changes produced by bronchial obstruction in infants, however, are identical to those found in adults.

Intrabronchial obstructions present the most striking and illustrative examples of the various effects of bronchial obstruction. Into this division fall the cases of intrabronchial foreign bodies, postoperative massive collapse of the lungs, the bronchial obstructions produced by exudates in laryngotracheobronchitis, and atelectasis produced by the thick plugs of asthma. Intrabronchial obstructions may be further subdivided into endogenous and exogenous types. Broncholiths, thick, tenacious, bronchial secretions, inflammatory exudates, and occasionally the material from a lymph node which has eroded through the bronchial wall, comprise the endogenous obstructions. Foreign bodies of every description make up the large list of exogenous elements which produce intrabronchial obstruction. The recognition and description of many phases of the whole problem of bronchial obstruction, with studies of its physiology and morbid anatomy, were in a large measure possible through clinical and experimental studies of the effects of these foreign bodies in the air and food passages.

Endobronchial obstructions are due to lesions of the bronchial mucosa, musculature or cartilagenous wall. They have assumed a constantly increasing importance as bronchoscopy and bronchography have demonstrated not only their presence but also their effect on bronchopulmonary physiology. They consist of inflammatory swellings or cicatricial stenoses of the mucosa, which partially or completely occlude the bronchial lumen; the various types of infiltrative, ulcerative, granulomatous or cicatricial tuberculous lesions, the specific inflammatory lesions of syphilis, rhinoscleroma and lep-

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rosy, with the characteristic deforming scars which these lesions produce when healing; and both benign and malignant neoplasms. The distortions produced by the kinking or twisting of the bronchial walls following such procedures as prolonged artificial pneumothorax, thoracoplasty or injuries must likewise be included in this group, although they should not be confused with compressions of the walls for which many of these same factors may be responsible.

The extrabronchial factors of bronchial obstruction consist of lesions in the mediastinum, heart or lungs, which compress the lumen of a bronchus by pressure from outside the bronchial walls. Of these, enlarged tracheal and hilar lymph-nodes, both tuberculous and nontuberculous, are the commonest of the non-neoplastic lesions. These nodes at times assume an extreme size and compress the trachea or both bronchi to the point of asphyxia. Enlarged mediastinal nodes are fairly common in children in whom, because of the soft nature of the cartilagenous bronchial wall and the relatively small size of the lumens of the major bronchi, severe dyspnea may be produced by a relatively mild degree of enlargement of the nodes. Other extrabronchial lesions producing bronchial compression consist of pulmonary and mediastinal tumors, aneurysms, cardiovascular anomalies, esophageal tumors or even, occasionally, esophageal foreign bodies.

Important as are the factors which produce bronchial obstruction, it is the degree of the obstruction and its location which are responsible for the pathological condition of the lung beyond the point of obstruction. In the majority of instances, the mechanics of obstruction can best be described by designating the obstructions as valves in a system of tubes. These tubes are only semi-rigid and they are not of constant caliber. Inspiration is accompanied by an expansion of the bronchus and expiration by a contraction. Consequently, numerous factors enter into the mechanics of each particular obstruction, but three types of phenomena form the basic physical effects of bronchial obstruction. These are well known but will be briefly reviewed. The simplest, or by-pass valve, consists of a small decrease in the size of the bronchial lumen, such as might be caused by an object lying across the diameter of the bronchus, the lumen remaining large enough to allow air to pass easily to and fro, without appreciably changing the volume of air entering or leaving the lung beyond the point of obstruction. Air passing back and forth over this irregularity is not actually obstructed except in that the column of air is broken to form eddies. Such an obstruction may be produced by a small mucous plaque on the bronchial wall, a small irregularity of the bronchial wall due to an early bronchogenic carcinoma, or a foreign body, such as an open safety pin lying loosely in the bronchus. The only evidence that can be obtained of the presence of such an obstruction is a limitation of motion of the chest on the affected side and a wheeze heard at the open mouth or on auscultation over the chest, loudest at the point of obstruction.

The second type of bronchial obstruction is observed when the obstruction has become more marked. It is characteristically produced by many foreign bodies, such as nut kernels, and is present at some stage of the growth of most endobronchial tumors or cicatricial bronchial stenoses. It is designated as a check-valve or ball-valve type of obstruction because air may pass in one direction only, and is dependent upon the physiological bronchial expansion and contraction which occur during normal respiration. Thus, if a foreign body lies in the bronchial lumen, air may pass it freely during inspiration as the bronchus increases in size. During expiration, however, the bronchial wall collapses around the foreign body, obstructing the flow of air out of the lung distal to the foreign body. Another factor contributing to this type of expiratory obstruction is the fact that the force of inspiration is greater than that of expiration. This difference increases with respiratory embarrassment. On subsequent respirations, as more and more air becomes trapped, an emphysema develops in the lung distal to the obstruction. This may be observed by physical signs, on the fluoroscopic screen or on roentgen films taken at inspiration and expiration. The classical signs are a shift of the heart and mediastinum toward the uninvolved side on expiration, with a return to the normal position on inspiration and a stationary, depressed diaphragm, emphysema, and widened and immobile intercostal spaces on the involved side.

It is possible, of course, that this type of obstruction may involve only the bronchus leading to a single lobe, and thus may produce a marked emphysema of one lobe alone or a cavity simulating a lung abscess. Similarly, if the bronchiole leading to a lobule is thus involved, a bullous emphysema may occur, which may rupture and produce a pneumothorax. An emphysema extending under the visceral pleura and into the mediastinum may also follow such an obstruction.

A difference between the mechanics of the check-valve and the ball-valve does exist. However, their ultimate action in regard to bronchial obstruction is, in most instances, identical. In the check-valve, the valve seat remains in a constant position, opening and closing as the bronchus expands and contracts. In the ball-valve, the obstructing element moves back and forth during inspiration and expiration, moving into and out of the valve seat. Under certain conditions, the check-valve or the similar ball-valve acts in the reverse manner, allowing air to leave but not enter a bronchus. Under such conditions, the lung rapidly becomes airless or atelectatic and the signs and symptoms are those of atelectasis.

Complete obstruction of a bronchus, allowing no air to pass the obstruction, either on inspiration or

expiration, is designated as a stop-valve obstruction. Following such an obstruction, the air in the portion of the lung beyond is absorbed and the lung becomes airless and shrunken, or atelectatic. A typical example of such an obstruction is the complete occlusion of a bronchus by a round foreign body, such as a nail head, or by an extensive, fungating bronchogenic carcinoma. The typical findings which characterize such an atelectasis are the density of the area beyond the obstruction, the shift of the heart and mediastinum toward the involved side, the elevation of the involved diaphragm and narrowing of the intercostal spaces on the involved side. The opposite lung, if the atelectasis is extensive, shows some degree of compensatory emphysema.

From the foregoing discussion, it is apparent that three principal factors determine the signs, symptoms and ultimate pathological condition of an obstruction of the lower air passages. The first of these is the level in the tracheobronchial tree at which the obstruction occurs; whether it is in the trachea, a major bronchus, or a bronchiole. Grossly, this may be considered an *anatomical* factor. The second principal factor is the degree to which the air passage is obstructed; i.e., whether the action produced is that of a by-pass valve, check-valve, or stop-valve. This factor is a *functional* one. Finally, the signs and symptoms will be dependent, but to a lesser degree, upon the relation of the obstruction to the bronchial walls; whether it is an intrabronchial, endobronchial, or extrabronchial obstruction. This is an *etiologic* factor. As these factors act collectively to produce bronchial obstruction, they must be considered as they collectively produce the various signs and symptoms of bronchial obstruction.

The symptomatology of bronchial obstruction is for the most part not characteristic of bronchial obstruction *per se;* certain underlying symptoms are fairly constant, however, influenced in each case by the underlying etiologic factor. Other symptoms become important only when they are associated with a history of a bronchopulmonary pathological condition. A cough, suggestive of bronchial irritation, may not in itself be significant, but it is one of the most constant symptoms of bronchial obstruction. It may be dry and entirely unproductive for weeks and suddenly be associated with hemoptysis and a foul, purulent sputum produced by a superimposed infection.

A wheeze is also an extremely important symptom because, as stated above, an object lodged in a bronchus, permitting air both to enter and to leave the bronchus freely, will produce none of the changes in the lung distal to the obstruction which are so characteristic of the other types of bronchial obstruction. Thus, with no abnormal physical findings, the wheeze heard throughout the chest, loudest over the location of the obstruction, may be the only sign or symptom of the object if it is nonopaque to x-rays.

Dyspnea is likewise an outstanding symptom of tracheal or bronchial obstruction. All degrees of dyspnea may be noted, from the rapidly fatal dyspnea accompanying an obstruction at the bifurcation of the trachea, to the sensation of constriction of the chest, or chest discomfort which is a characteristic expression used by patients with early bronchial neoplasms. Pain is not a common symptom unless the underlying pathological condition is extensive and associated with destructive changes. Patients with sharp foreign bodies in the bronchi rarely complain of pain, although irregular objects, such as sharp bone fragments or dental fillings, occasionally cause pain which the patient may localize quite accurately to the site of the foreign body.

Certain symptoms should be mentioned as characteristically accompanying lesions that produce bronchial obstructions. The enlargement of the neck and venous engorgement of the neck and chest which follow upper mediastinal neoplasms are examples of such symptoms. Similarly, the hoarseness due to a paralysis of the left vocal cord following involvement of the left recurrent laryngeal nerve in a neoplastic process at the hilus is a symptom of that type of neoplasm.

Hemoptysis is one of the most important symptoms of any type of pulmonary pathological condition. In reference to bronchial obstruction, it is not infrequently the first evidence of the presence of an intrabronchial foreign body or an early bronchogenic carcinoma. Benign bronchial neoplasms have been known to manifest themselves by this symptom many months before their slow growth occludes the lumen of the bronchus to give further evidence of their presence.

In spite of the extremely important role which roentgenology plays in the diagnosis of diseases of the chest, the physical examinations in themselves not infrequently lead to important clues which finally establish the correct diagnosis, in spite of contrasting or negative roentgen findings. One of the most constant signs in almost all cases of bronchial obstruction is a definite limitation of motion on the involved side, independent of the degree of the obstruction. Careful inspection of the chest is thus of great diagnostic importance in spite of its apparent simplicity. Other signs and symptoms are more dependent upon the degree of the obstruction and on its location.

In recent years bronchoscopy has become a universally accepted procedure. The bronchoscope has come to be considered a diagnostic instrument or speculum which permits direct inspection of the tracheo-bronchial tree of a patient of any age. Indications for bronchoscopy, which were formerly limited to the extraction of foreign bodies, have broadened so that now bronchoscopy is a routine aid in both the diagnosis and treatment of bronchial obstruction. Foreign bodies, tumors, bronchial compression and cicatricial stenoses produce iden-

tical physical and x-ray findings. Consequently, direct inspection must serve to establish the diagnosis of the actual obstructing agent. In the inflammatory diseases dried plaques of mucus, edematous infiltrations or the cicatrix produced by a healing ulcer may be responsible for the findings of obstruction, and only the endoscopic view can establish the correct diagnosis. In cases of neoplastic diseases bronchoscopic inspection serves to establish the nature of the lesion through the removal of tissue for biopsy, as well as to aid in determining its extent along the bronchial walls. In this respect, bronchoscopic inspection of the upper lobe bronchi and distal portions of the lower lobe bronchi deserves special consideration. Various technical measures are available to the bronchoscopist to make these examinations. The use of retrograde telescopes and bronchoscopic mirrors serve to aid in the inspection of certain portions of the upper lobe bronchi. The use of the biplane fluoroscope to guide curved instruments into the upper lobe bronchi or into distal portions of the lower lobes facilitates the removal of tissue from those areas if they cannot be inspected directly. The use of artificial pneumothorax to bring an upper lobe bronchus into a more direct line with the main bronchus is of extreme value when an upper lobe bronchus is obstructed by a lesion suspected of being a neoplasm.

Since a bronchial obstruction is dependent upon some underlying pathology due to a host of etiologic factors, the final diagnosis must be that of the underlying pathology. The differential diagnosis of bronchial obstruction, *per se*, consists of a consideration of those lesions simulating the effects of partial or complete obstruction. In the first category, bronchial asthma and pulmonary emphysema assume an important role because often they both closely simulate diseases due to bronchial obstruction. Possibly even more significant is the frequency with which a true bronchial obstruction is considered a simple asthma. The confusing factor most frequently is the wheeze produced by an obstruction which is asthmatic in character. It differs from an asthmatic wheeze, however, because the latter is usually altered at least temporarily on cough, and is expiratory in nature. The wheeze of bronchial obstruction is uninfluenced by cough and is inspiratory in character. In questionable cases, bronchoscopy and bronchography lead to a final diagnosis.

Lesions simulating the effects of complete bronchial obstruction or atelectasis are more numerous and consist essentially of pneumonic consolidation, empyema and tumors. Tumors large enough to give physical evidence of pulmonary pathological conditions may usually be recognized as such by their roentgen configuration. They are, of course, not infrequently involved in a process producing bronchial obstruction, when their differentiation from the atelectasis they have produced becomes almost impossible. Planography and over-exposed roentgen films may aid in such differentiation, and again bronchoscopy and bronchography are indispensable.

Atelectasis is most frequently confused with intrapleural collections of fluid. A persistent atelectasis, having had an acute onset, closely simulates a pneumonia followed by empyema. The actual differentiation depends on the position of the heart and mediastinum, fluid causing them to be pushed away from the involved side and atelectasis drawing them toward the affected side. The shifting dullness of fluid is another differentiating point. Since an empyema may follow an acute bronchial obstruction, however, the actual diagnosis may be made only after the fluid is withdrawn and the lung fails to expand.

The differentiation of an acute pneumonic consolidation from an acute atelectasis is usually dependent upon the history and the size of the involved lung in relation to its normal size. Postoperative massive collapse of the lung is frequently confused with postoperative pneumonia, but a careful physical and roentgen study of the position of the heart will be the most important distinguishing characteristic. Added difficulty is encountered, however, in cases of complete bronchial obstruction, upon which is superimposed a severe suppurative infection to produce a "drowned lung." In this case the products of suppuration so completely fill the bronchi and lung distal to the obstruction that it retains its normal size and shape, yet has the physical and roentgen findings of consolidation. Differentiation in such a case may be made only through a history suggestive of bronchial obstruction, a failure of the pneumonic process to subside and the inspection of the involved bronchus with a bronchoscope.

ABDOMINAL PREGNANCY WITH REPORT OF TWO CASES

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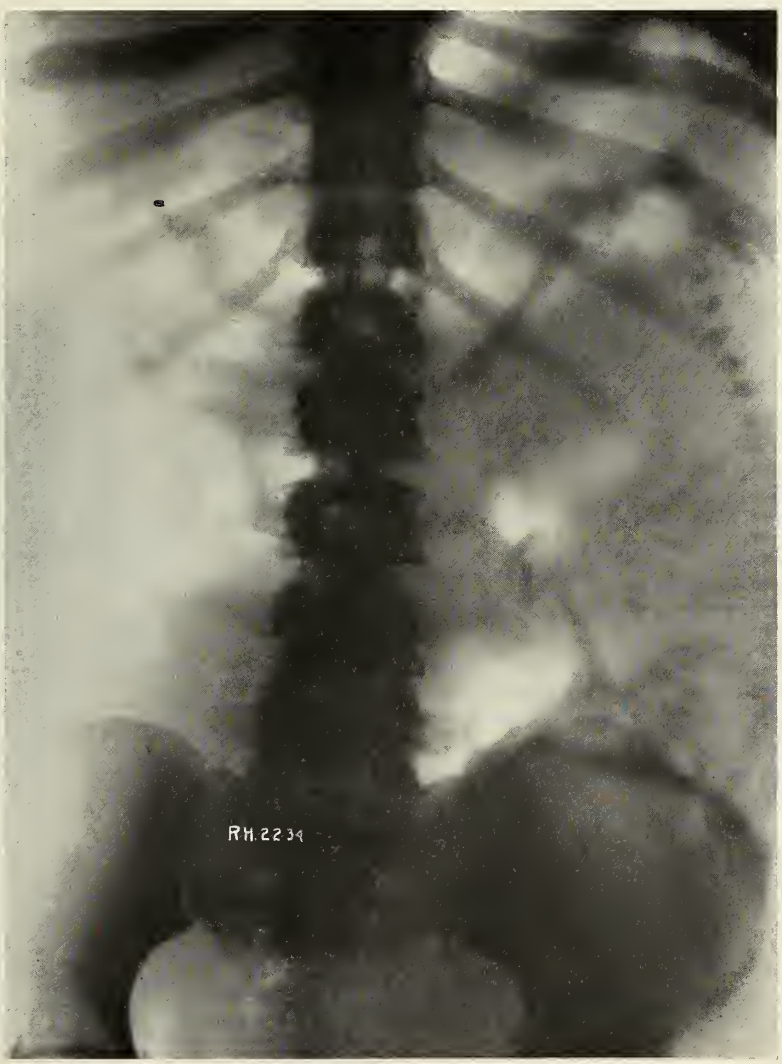
EXTRA-UTERINE pregnancy is a pregnancy occurring outside of the cavity of the uterus. The most common extra-uterine pregnancy occurs in the tube, but ovarian pregnancy and primary abdominal pregnancy have been reported.

The first case I wish to report I consider to have started in the left tube as a tubal pregnancy, and after rupture the gestation continued, with the placenta attaching to surrounding tissue, thus becoming an abdominal pregnancy. This case is of special interest, first, due to obtaining a normal baby at term, and, second, the opening of the abdomen seven weeks after the first laparotomy, to deliver the placenta. This patient was on the staff service at Reid Memorial Hospital and received more attention during her pregnancy than the average pay patient. She entered the hospital six times during her pregnancy and was seen by eight different doctors for medical care while in the hospital. She had three sets of x-ray pictures taken during the period of pregnancy. The time was February 1, 1934, and the history was as follows:

Mrs. R. H., colored, age 34. She had one previous normal pregnancy fifteen years before, in 1919. One year later she had a miscarriage and no other pregnancies up to the present one. Her menstrual history was that the menses were irregular as to time and the amount was over normal. Patient had good general health and weighed 180 pounds. History during pregnancy:

Menstruated in April, 1933, and in May had a very faint, bloody discharge. In June patient was nauseated but no vomiting present; patient was up and about the house. On July 5 had severe cramps and went to bed on account of pain on the left side of the pelvis. Doctor was called for the first time and a hypodermic of morphine given for pain. Patient was in bed for a week and then got up for a few days, but had to go to bed again on account of the pelvic pain; and from then on was in bed throughout her pregnancy. July 30 she had a heavy hemorrhage from the bowels, which continued for a week, accompanied by uterine hemorrhage.

FIGURE 1



1. Entered hospital first on August 15 and left August 20, with a diagnosis of a possible pregnancy. X-ray at the time was negative. She came in

complaining of pain over the pelvis, which was worse on sitting up in bed. She was having some uterine hemorrhage.

2. Hospital entrance September 24 and left October 3, with a diagnosis of pregnancy at five months, with a threatened miscarriage. Came in on account of pelvic pain and more uterine bleeding. X-ray at this time showed fetal bones, with the head about three inches in diameter, in the upper edge of the pelvis and to the left of center.

3. Hospital entrance November 1 and discharged November 3, with a diagnosis of pregnancy about seven months. Came in on account of severe abdominal pain.

4. Hospital entrance December 24 and discharged December 29, with a diagnosis of pregnancy. Came in on account of severe abdominal pain. Patient was worried and asked how she would know when she would have labor pains, after having this continuous pain for months.

5. Hospital entrance February 1, 1934, on account of hard abdominal pains. The abdomen was as large as a full term pregnancy. X-ray taken at this time, as shown in Figure 1, showed the baby to be in an L.O.A. position, with the head high out of the pelvis and over on the flange of the left ileum. Patient was referred to my service with a diagnosis of extra-uterine or abdominal pregnancy at term. Abdomen was opened and the intestines and parietal peritoneum were covered with a thin membrane, grayish in appearance, and different than is ever seen in any other condition. Coils of the intestine were separated, thus rupturing into the amniotic sac, and a normal baby girl was delivered, weighing 6 pounds 14 ounces. It was possible to examine the uterus which was found to be about twice the normal size. The placenta seemed to be everywhere and no attempt was made to disturb it. Packing was left in sac and the end of the gauze and cord protruded from the incision, which was partially closed. The cord dried after a few days and was finally cut off at the skin edge and the packing was removed. There was some drainage and the abdominal incision gradually fell together and healed, with the placenta still in the abdomen. Patient got up in about two weeks and felt very good, and finally went home on March 1, with the placenta undelivered.

6. On March 20 patient returned, with a fever of 101 and a pulse of 99. She had discomfort over the abdomen and the mass in the pelvis and lower abdomen seemed more pronounced than it did at the time she left the hospital. The abdomen was opened and the placenta, gray in color, could easily be differentiated from viable tissue. It readily peeled and separated from the sigmoid, coils of small bowel, and down over the left broad ligament to the uterus. No hemorrhage occurred and the separation was made without any difficulty. The cotyledons of the placenta were undergoing organization and were three inches in thickness. The placenta weighed two and a half pounds and is shown in Figure 2, with the cord about three inches

FIGURE 2

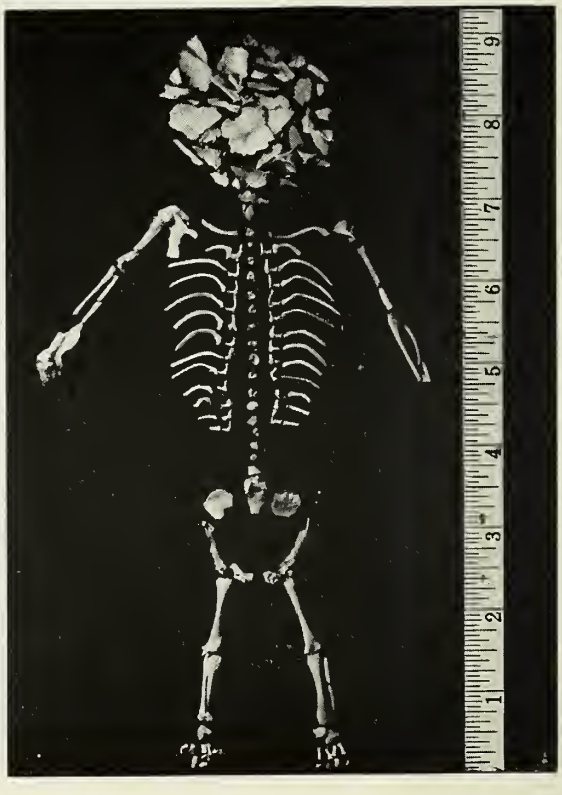


in length. The specimen has been in a formalin solution, but the dark line, marked A, extending across the upper part of the mass, may be seen, where it had been wrapped around a redundant sigmoid for blood supply. The abdomen was closed with a small penrose drain in the lower end of the incision, which was removed on the third day. Patient made an uneventful recovery and went home on April 4.

The baby had a normal infancy and is now thirteen years old, and mother and daughter are well. The mother has never been pregnant since this pregnancy.

The second case, with a different ending, has the the following history. Time of incident was May 9, 1939. Mrs. J. P., white, age 66. One normal

FIGURE 3



pregnancy 44 years before. In 1906 patient was ill for some months, during the summer. She had intermittent uterine bleeding at the time and was in bed for some weeks. At one time a mass was easily felt on the right side, extending up out of the pelvis. The family doctor on the case has died, as also has the consultant doctor. The doctors told the family they considered the patient to be pregnant. The mass in the lower abdomen began to get smaller and finally disappeared, with no birth. Since this time patient has had some indefinite attacks of discomfort over the abdomen on the right side. Menopause was normal and over at the age of 48.

Patient was seen May 9, 1939, in consultation. She became ill the day before, with general abdominal pain which localized over McBurney's point. She was nauseated and constipated. Fever was 99.6 and pulse 100; leukocyte count 16,000, and polys 83 per cent, with urine negative. The condition was typical of an attack of acute appendicitis and an immediate appendectomy was advised and carried out. Abdomen was opened and a moist abdominal cavity with a gangrenous appendix found. After removing the appendix, I examined the right pelvis on account of her intermittent discomfort during the years. A mass was felt attached to the right broad ligament, about 2½ inches in diameter. It felt more like a sac of golf tees than anything else I could compare it to. It was cystic in nature, with a thin layer of calcium deposit in the wall and filled with a mass of clean, moveable bones. The sac was removed and the bones mounted, as shown in Figure 3.

In going over the history, the patient first had a right tubal pregnancy which ruptured and became an abdominal pregnancy. The fetus lived up to 5 months and then died due to lack of blood supply. The fetus was encapsulated and all the soft structures absorbed, leaving the bones absolutely free and clean in the sac, which was removed 33 years later. The patient made an uneventful recovery from the surgery performed.

THE TREATMENT OF ASPHYXIA BY FIREMEN

Orville E. Spurgeon, M.D.

MUNCIE

IN all cases of asphyxia it is extremely important that artificial respiration be administered immediately.

It is not unusual for any one of us to have a hurry-up call in which a patient is said to be in extremely bad condition on account of asphyxia. When we respond to the call we often find that there was no real emergency, and that there was no reason for being in a hurry, but on the other hand some of these cases must have prompt treatment or a life will be lost. The patient may be unconscious, sometimes very cyanotic, sometimes breathing has ceased or almost ceased, and sometimes the person is dead. Usually the one who calls by telephone is excited and oftentimes much worried. This being true, he is in a hurry to obtain immediate help.

For a good many years it has been the custom to call the fire department or the police department for immediate help. Also, an effort is usually made to call one or more physicians. These calls sometimes come in the night, or oftentimes during the day when the doctor is out on a call or when he is very busy.

These circumstances make it very difficult for an excited person to obtain a doctor quickly, so the fire department seems to be the most available source of help. Throughout the United States the fire departments have been depended upon year after year, until now it is the common thing in this kind of emergency to call the fire department.

For many years the fire departments have had some sort of apparatus which they have attempted to use to resuscitate people who have drowned, or who have become asphyxiated with gas, or who have ceased to breathe on account of some other cause.

It is not my purpose to go into a description of any of the machines now in use, or that have been in use. Some of the older machines, that at one time were heralded as wonderful, are now considered to be of little value or actually harmful. Some of the newer machines appear to be more effective, but must be used by experienced people.

In almost all cases the firemen arrive on the scene before a physician arrives, and oftentimes long enough before to make the difference between success and failure.

It is my opinion that the use of manual artificial respiration should be the first thing done in an attempt at resuscitation. Either the prone pressure method or the Silvester method may be used, but the important point is that where respiration has ceased it is extremely important to get the respiration going immediately, as even a delay of a minute or a few seconds may make the difference between life and death. Someone should immediately carry out artificial respiration manually, while someone else gets the mechanical apparatus in working order and going.

If a patient has ceased respiration at the time

the fire department or the doctor is called, it is probable that the patient will be dead by the time the fire department or the doctor arrives, unless someone does artificial respiration until the doctor or the firemen arrive. This being true, the person who receives the telephone call should tell the person who is giving the call, to do artificial respiration until help arrives.

It has become a custom nowadays to send emergencies to the hospital. It is exceedingly unwise to send a patient to the hospital whose respiration has ceased. Artificial respiration should be given immediately.

It is important to determine the causes of the cessation of respiration. When drowning occurs the cause is usually evident, and in this case it is necessary to empty the lungs of water and then do artificial respiration.

A common cause of suspended respiration is poisoning by artificial gas. I have been told that natural gas (which some communities are now using) is less toxic than the artificial gas, and that there have been fewer deaths in the same length of time from natural gas than there were from artificial gas. I have also been told that the gas supplied in drums is not as toxic as either of the other two forms of gas mentioned above.

Carbolic acid poisoning will cause respiration to cease, and may respond to treatment. The addition to whiskey of chloral or other drugs may cause respiratory failure and death, unless promptly treated. Potassium cyanide will cause respiration to cease, sometimes before the heart ceases to beat. In this condition artificial respiration is of value. In this connection I wish to call attention to the fact that potassium cyanide will sometimes cause the jaws of the patient to be locked, as in lockjaw, and it is almost impossible to get the mouth open. This fact may interfere with getting air into the lungs if the tongue drops back.

In doing artificial respiration I have sometimes found it difficult to get the air passage patent. More than once I have seen artificial respiration being attempted when the air neither entered nor left the lungs, because the tongue seemed to go back and obstruct the air passage. Of course, it is always possible for other things, such as false teeth, chewing gum, or tobacco, to get into the air passages and stop or interfere with respiration. There was a child in Muncie sometime ago who died of suffocation, and at postmortem examination chewing gum, which had interfered with respiration, was found in the larynx.

From the remarks just made, it is evident that in certain cases more than artificial respiration must be done if a life is to be saved. For example, a patient who has swallowed carbolic acid certainly has a better chance for life if he receives treatment for carbolic acid poisoning, as all the artificial respiration in the world will not save his life unless proper treatment is given to counteract the poison effect of the carbolic acid. Here the doctor is indispensable.

According to some good authorities, after a person has ceased to breathe for ten minutes they are usually dead and cannot be revived, but it is not always easy to determine when respiration has entirely ceased. This being true, it is sometimes possible to resuscitate a person who is apparently dead.

The apparatus called an "inhalator" delivers oxygen and carbon dioxide under moderate controlled pressure, and may be used in conjunction with artificial respiration by the manual method, or it may be used to stimulate the respiration if the patient is still breathing at all. The "respirator" delivers carbon dioxide and oxygen under pressure and is used with a mask over the nose and mouth in such a way as to deliver the carbon dioxide and oxygen under regulated moderate pressure. This apparatus reverses and produces suction. It can be regulated to produce first, inflation of the lungs, and then produce suction, removing the air from the lungs. This apparatus does artificial respiration mechanically.

In asphyxia it is my opinion that the manual method of artificial respiration should be used immediately and, if available, an inhalator, delivering carbon dioxide and oxygen, should be used as an adjunct. Then after artificial respiration has been well established, and a respirator is operating perfectly, the respirator may be employed instead of the manual method of artificial respiration.

The Schaefer Prone Pressure method has been used successfully many times. In one report of eighty-two drownings thirty-five were resuscitated by the Schaefer Prone Pressure method. In another report of forty-four drownings a resuscitator was used with only two recoveries. The resuscitator has been used successfully in many cases of asphyxia of newborn infants.

I have written a letter to the fire departments of several cities—Indianapolis, South Bend, Terre Haute, Fort Wayne, and Rushville, Indiana; Chicago, Illinois; Columbus and Cincinnati, Ohio; and others. Almost without exception the chiefs of the fire departments have replied to my letter, saying that they have been able to resuscitate a number of people by means of artificial respiration. Some of these letters have described their experiences in which they were successful in resuscitating certain people. The firemen are enthusiastic about this work, and believe that they have saved a number of people from death.

My conclusion is that the fire department should be encouraged to respond to cases of asphyxia, and that we should give the department our cooperation, but unless a physician also responds to the call and cooperates with the firemen a patient will occasionally be lost who could have been saved. The fire department has but one method of treatment, and if this fails the patient's life will be lost. It is my opinion that some means should be devised by which a physician is made available who will cooperate with the firemen. By this method more lives will be saved than are now being saved.

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THE JOURNAL'S PLATFORM

1. **Preservation of American Medicine through voluntary service to the sick.**
2. **Advocating full-time county health officers, locally appointed.**
3. **Restoration and preservation of our natural waters and resources.**
4. **Maintain the present high standard of the Indiana University Medical Center, combining the full medical course in Indianapolis.**
5. **Elimination of diphtheria and smallpox through immunization and vaccination.**
6. **Support of the state-wide campaign against undulant fever.**

Editorials

48
MD 1
INDIANA

SUCH is the license plate for Dr. Roscoe Sensenich, South Bend, President-Elect of the American Medical Association, for the current year. Indiana's Secretary of State, who has charge of the licensing of motor vehicles in Indiana, has set aside four thousand low numbers for Hoosier physicians. And these will be not merely "low numbers," but each will carry the initials "M.D.," preceding the number.

In so far as is practicable, this plate will carry the local office number of the car owner, provided of course it is less than five figures. The big idea remains that it identifies the owner as a member of the greatest of the professions.

It will afford no special privileges, other than identification; it will not mean that the driver can rush up to Butler Field House, come next March, and demand front row seats for the annual Hoosier Hardwood Classic; it will not mean immunity from arrest for law violations.

Numerous other "special numbers" are reported from over the state, among them being number 50, allotted to the current president of the Lake County Medical Society, which this year is observing its 50th anniversary.

We rather like this recognition of Hoosier Medicine, not that it sets us apart from other citizens, but it does serve as an identifying mark for physician car owners and drivers; in many instances it will "pass" such cars to an emergency and, above all, it will identify the driver as a Hoosier physician.

So, as we go about the state, we will note the many "M.D." licenses on these four thousand cars,

each license costing just the same amount that other citizens pay and, generally speaking, conferring no special rights on the drivers thereof—just a recognition of what Indiana Medicine has done, and is doing, for the citizens of this great state.

"KICKBACKS"

Numerous titles have been given to this ancient custom of "fee splitting," a custom which seems to be of a most hoary age. Rebates, commissions, et cetera, are but a few of the names that have been given to the custom. But with all the publicity given the matter by medical groups, the practice continues to go along—in fact, we have reason to believe it is increasing.

Almost two years ago the Federal Department of Justice interested itself in the subject, made some investigations here and there over the country and published the names of many offenders; since then we have heard nothing further about the activity of the department.

For a long time this evil seemed to be confined to the surgical field, numerous surgeons over the country openly offering a "split" of the fee received from referred cases. It is said that in some areas such surgeons made a veritable "killing," their income having been doubled and tripled.

The American Medical Association, through its Code of Ethics, denounced the practice, while the American College of Surgeons required all new members to take an oath that never—no, never—would they indulge in such nefarious practices. State and local societies "legislated" against it, while a rather large group of medical men, having the interests of the profession at heart, went about preaching against it. But, as we have said, the thing goes merrily—and profitably—along.

Along about the time the surgical racket got to going strong there arose another group who wanted some of the "gravy," the ophthalmologists. They had little trouble in interesting manufacturing opticians in setting up "dispensing counters" in their establishments. Eye physicians who were in on the deal made the refractions, making the usual charge for same to the patient. The latter was given a prescription and told to go to the optician named thereon, to select his glasses. *This optician set the prices for the glasses*, later delivering them to the patient and collecting the entire cost of the transaction. Then the optician figured the normal cost of the job, plus the "service charge" and probably some extras, then remitted the balance to the referring eye physician.

Several eye physicians at one time or another have told us that this plan paid all their office overhead, with a handsome monthly balance, besides. It is estimated that hundreds of thousands of dollars have been taken from patients in this particular racket.

Now we are told that certain roentgenologists are setting up a rebate plan and that some prescription pharmacists are casting longing glances in the same direction. The A.M.A. House of Delegates, at the recent Cleveland session, instructed Secretary Lull to call the attention of this growing evil to every state and county medical society in the country, urging them really to do something about it. Certain of our national lay magazines already have had a lot to say on the subject and probably will again talk about it. Some of our newspapers have commented on the evil, hence it is reasonable to presume that soon there will be another wave of publicity, a thing the medical profession should especially avoid at this time, when we still are under attack in certain quarters.

AGAIN THE KAADTS

Quite some time ago The Journal announced that the "Kaadt Clinic," in South Whitley, was to be closed, due to an action taken by the State Medical Board. The full story is a long one and need not be repeated here. Suffice it to say that the place was under investigation by the Indianapolis Better Business Bureau for some time and they amassed a veritable mound of evidence, none of which was to the credit of the operators of this "famed" institution.

About the same time Robert Johnson, staff writer of *The Indianapolis Star*, after having been examined by reputable Indianapolis physicians, who pronounced him absolutely free from any symptoms of diabetes, as well as other disease, betook himself to South Whitley and was at once accepted as a diabetic patient. His stories of his visits there were very entertaining to us all.

Finally, charges looking to the revocation of the licenses of the Kaadts, Charles and Peter, were filed before the State Medical Board and a hearing date set. For some reason or another, Charlie took a "run out powder" and surrendered his license, but "Pete" decided to fight to the last ditch, which he did.

Found guilty of "gross immorality" by the board, his license was revoked. In passing, it might be well to mention that one of the definitions of gross immorality is "anything contrary to the public good." Quackery, of course, comes under this head.

But "Pete" did not stop there; he went back to his home county and there filed suit to have his license restored, which was done in due time by the local Circuit Judge. Meantime, the many local friends of the Kaadts rallied to his banner, including many organizations and the local news-

paper. For a time we were literally flooded with newspaper clippings, letters, et cetera.

The Better Business Bureau appealed to the Indiana State Supreme Court, where the case was reviewed, and on January 15 it handed down its decision to the effect that the action of the State Medical Board was entirely within the law—and "Pete" thereby lost his license. As we understand it, this action is final and means the end of the Kaadts in Indiana medical circles.

Supreme Judge Oliver Starr wrote the opinion, a most readable bit of legal phrasing, and setting up material that may well be used in other similar cases, should they arise, which of course they will.

About the same time, another Indiana plague spot of quackery was disposed of, this by the voluntary giving up of his Indiana medical license by one George Franklin Smith, of Terre Haute. We are prone to wonder if Smith carefully watched the Kaadt case; probably, if he did, he learned that the Medical Board and the Better Business Bureau mean business when they go after a quack.

It is said that he claimed he did not have the means to fight the "wealthy" medical society and the Better Business Bureau. Smith, so it was alleged by the investigators, held himself out as an expert in the treatment of many diseases, including cancer, tuberculosis, arthritis and what-not; that his "method" insured complete and absolute cures. He called this "chemical therapy," stating that this system was developed by Dr. William F. Koch, of Detroit, and that he got his "fluid" from Koch.

"Two more down and a lot more to go," might well be the slogan for our now hyperactive Medical Board and the Better Business Bureau. For the first time since the organization of that Board, back in 1897, sufficient funds are available for the employment of a full-time investigator, this being brought about by the annual registration fee of five dollars collected from all who engage in any branch of the healing arts.

All these things will no doubt have somewhat of a deterrent effect on the part of those now engaged in medical quackery of any sort, as well as those few "hungry souls" who may be planning such a career in Indiana in the future. For many years it was a fertile field and we had quacks of all sorts and in all sections of the state. We hope to see the time when such "carryings-on" in Indiana just do not exist.

Editorial Notes

A little chat, via telephone, with Dr. Frank B. Ramsey, newly-elected Associate Editor of THE JOURNAL, indicates that we have a very good man to take the place of Doctor Forster. Frank is one of the younger group, limiting his practice to surgery, hence will prove very valuable as a consultant; we are very pleased to have him as an associate.

Now comes the Indianapolis Medical Society with plans for a "Centennial Program." My, but we are getting old, what with a centennial anniversary for something or other every little while. Lake County is entitled to but one-half a centennial this year, but they are planning a big party just the same. If this thing keeps up we soon will be attending birthday parties every few weeks!

Plans are in the making for increasing the number of scholarships for medical students, a plan inaugurated not long ago by the Council of the Indiana State Medical Association. As has been outlined, these scholarships are to be awarded to those who agree to locate in a smaller community for a period of at least five years after graduation. The plan was originated to accommodate six such young men, but steps now are being taken to secure additional funds that will mean an increase in the number of such students. What with this plan and the similar one to step up the entrance of young women into our Nurses Training Schools, it would seem that Indiana is doing her full share in both these important programs.

Looks as though, after all, the General Practitioner is coming into his own—a right that never should have been denied him. Some time ago Indiana went right out front on this thing, organizing its own group; then along came other states and now, so we are officially advised, the American Academy of General Practice is a healthy, lusty youngster, fully capable of making his own demands—and, mark our words, he will get every one of them.

Too long has the "G. P." been "sorta" hamstrung; too long has he been told to remain in his own habitat—back in the bushes. But no longer is he to be content with being "just a doctor"; he wants to be "somebody," and that is just what he will be. Specialists may come and go, but the grass roots men of the profession are here to stay, and from now on they demand to be heard—to have a real voice in what goes on in American Medicine. More power to 'em, we say!

As expected, there was some criticism directed against the article by Doctor McCormick, in the January number of THE JOURNAL on "planned families." This is an old problem, for many years various persons throughout the country having "had their say" about such matters. Doctor McCormick has spent a lot of time in this study and has become a recognized authority in the matter. Under "Voice of Medicine," in this number, appears a critical communication from one of our members. We again wish to say that while the columns of our magazine are open to all members, THE JOURNAL is not to be held responsible for the opinions of our contributors. We expect that, from time to time, there will be some who do not agree with all that appears in our publication.

Medicine has not yet arrived at the "perfect" stage. But we do feel that our members have every right to submit scientific articles, even though all are not in accord with the writer.

Considerable criticism having arisen concerning "unfair practices" by some Indiana physicians in the management of Veteran's Administration cases, an investigation was made by our association committee, of which Dr. Charles F. Thompson is the head. After due investigation he reports that in the past year and a half there have been but *five* such cases. All this followed a statement issued by Dr. Paul Magnuson, medical director of the administration, who announced that many such cases were reported from over the country and that he had asked the American Medical Association to make a thorough investigation. These complaints involved the "mishandling" of such cases, overcharges and whatnot. We are gratified to learn that but few such instances are to be charged against Hoosier Medicine.

Did you know that, a long time ago, back in the days of the Roman Empire, life expectancy was a matter of 25 years and that as of today it is 67 years? Medicine, public health, et al., have gone a long ways and in our opinion the end is not in sight. People are becoming alert to the fact that many diseases are preventable and that others, while established, can be controlled. For example, take many heart cases—these victims, with a well-planned life, live a long time. The same is true of many diabetics—they go along, enjoying at least fair health for many years. Time was, and within the memory of most of us, when heart cases and diabetics saw their numbers "come up."

We just can't get away from the subject of undulant fever, especially so when both the medical journals and the lay press are stressing this new addition to the "killer family." And, too, our members are awakening to the fact that here we have a disease that demands the most careful attention, not only in treatment but especially in the matter of diagnosis. Not so long ago we had too many members who refused to believe that there is such a thing as the chronic type; now it is an established fact that chronic undulant fever really does exist—in far greater numbers than we ever had supposed.

It is announced that 44 new doctors have been licensed to practice in Lake County, 16 of them choosing to locate in Gary. This raises the total of Lake County licensees to 320, 270 of these already being members of the local society. This means that the local society officers have a job before them, that of enlisting *all* of these new physicians into the local body. Incidentally, we note that over the state, generally, the new licensees are, in the main, joining up with the local societies. Somehow they have learned that it pays to be an active participant in the goings-on in their local counties.

Approximately a hundred and fifty physicians attended the twenty-third annual Secretaries' Conference held in the Claypool hotel in Indianapolis February 15. Dr. A. M. Mitchell, who has served as chairman of the conference committee since its inception, was re-elected for next year.

Icy roads in northern Indiana and forecasts by radio and newspaper of severe cold weather cut down the attendance. The program was presented as scheduled. Papers of the principal speakers will be published in The Journal, and those of the other speakers will be used if space permits.

Dr. Elmer L. Henderson of Louisville, Kentucky, chairman of the A.M.A. Board of Trustees; Dr. Richard L. Meiling of Columbus, Ohio, secretary of the A.M.A.'s Council on National Emergency Medical Service, and Congressman Forest A. Harness of Kokomo, headlined the speaking program.

President's Page

THE NURSING SHORTAGE

ONE of the perplexing problems facing the medical profession in Indiana is the task of finding sufficient nursing services for their sick patients. The critical need for nurses in hospitals is at an all-time high. To procure a registered nurse to take care of the average seriously ill patient in the home is almost an impossibility. This problem is not limited to Indiana. It is nation-wide. "The Nursing Problem in America" was the subject of a panel discussion at the recent National Conference on Medical Service in Chicago. The A.M.A., surgical societies, nursing organizations, the American Hospital Association and other groups have given considerable time at their recent meetings to discussions of this problem.

There are two reasons for this present nursing shortage. More nurses are needed than ever before, and the supply is decreasing. More nurses are needed to staff the increased civilian hospital enrollment and the larger veteran facilities. More nurses are employed in industry, in public health services and other endeavors. At the same time it is estimated that there are approximately 50,000 less nurses actively practicing than there were six years ago. In 1946 only 30,000 student nurses entered training in the United States. It is estimated that at least 45,000 graduating nurses yearly are needed to meet the present minimum requirements if our present system of medical care is to continue as it is. The present rate of enrollment will furnish less than one-half of that number.

Many physicians believe that there are some basic faults with the present system of nursing education that must be corrected, if even an approach is to be made toward obtaining sufficient personnel. It seems reasonable to assume that more nurses might be recruited if the minimum age when they are admitted to schools would be lowered from 18 to 17 years, so that those girls graduating from high school at the age of 17 could be accepted in training without waiting a year. In that time they become established in some other line of work and are lost to the nursing profession.

It has been suggested that two classes of nurses be recognized, and that those girls desiring to become only practical nurses be given a shorter and less strenuous course of training. This would equip them to do much of the routine nursing when properly supervised, as the nurses' aids are functioning now. These girls should be given proper credit for this course of training, if they then wished to become graduate trained nurses by completing the full course of training.

There is much expression of opinion that the regular training course for nurses should be lightened so that more girls could qualify, and that those nurses who wish to teach, supervise or do special types of work, be given opportunity for postgraduate training to prepare them for those special responsibilities. The problem is not as simple as one might think, because it has been pointed out that those schools with the larger academic programs have more applications than the ones with a less strenuous course of study.

This nursing shortage deserves the attention of the medical profession. The A.M.A. has a committee studying the problem and trying to make constructive suggestions concerning its solution. They are cooperating with nursing groups and the American Hospital Association in an effort to find the proper answer.

In Indiana a nurses enrollment committee recently was formed on a state-wide basis by representatives of the Hospital Association, the Nurses Association, the Indiana State Medical Association and other interested groups. The purpose of this committee is to stimulate interest and activity throughout the state in any plan designed to enroll more nurses in our training schools this year. It is the hope of this committee that similar groups will be formed in most of the counties for the same purpose. The actual results can be accomplished only on a local basis. The physicians can and should take a leading part in this endeavor. Physicians have a sincere interest in the continuation of good nursing care, because it is an integral part of every medical care program.

What can the physician do in this regard? He can advise any girl to enter training if she is interested. He should also insist that the demands upon nurses, both students and graduates, be reasonable and that their compensation be adequate as compared to other standards. They deserve satisfactory living conditions and adequate recreation. The causes of the decline in the numbers of nurses should be evaluated on a local basis and objectionable features eliminated when possible.

It is apparent, however, that the shortage of trained nurses cannot be corrected immediately by any method. Hospitals must use more nonprofessional help. Many hospitals are already training and using nurses' aids in large numbers. A few communities are considering the project of training nursing attendants in the high schools. All of these people, with a short course of intensive training, can learn to do most of the work of the trained nurse when properly supervised. Many of our hospitals could not operate now without this help.

Nursing services, hospital services and medical care are so related that the public now thinks of them as a unit. Physicians must give their full support to see that each of these are available. Otherwise there develops a feeling on the part of the public that medical care is unavailable or unsatisfactory. Good public relations demand that we do not let this occur.

Cleon A. Nafe

OUR NEW ASSOCIATE EDITOR

DR. FRANK B. RAMSEY of Indianapolis has joined the official family of THE JOURNAL in the capacity of associate editor, succeeding Dr. N. K. Forster of Hammond, who has moved to California. Doctor Ramsey was elected by the Council in January.



The new associate editor is no stranger to Indiana medicine. A native of Bloomington, Indiana, it was only natural that he should take his premedical training at Indiana University. After his graduation from the Indiana University School of Medicine in 1927, he interned at the Indianapolis General Hospital and took a surgical residency at the Indiana University Medical Center. After a fellowship in surgery at the Lahey Clinic in Boston, he opened an office in Indianapolis in 1933 for the practice of general surgery.

Doctor Ramsey answered his country's call to military service in January, 1941, and was in uniform until March, 1946, holding the rank of lieutenant colonel at the time of his discharge. He was surgeon for the "fighting" 38th Division, U. S. Army, and spent twenty-two months in the Pacific theater.

In 1939 Doctor Ramsey was chairman of the Section on Surgery. He was a member of the Committee on Instructional Courses in 1947 and is now serving on the Committee on Veterans Affairs and Rehabilitation for the second year. He is on the faculty of the Indiana University School of Medicine, teaching surgical pathology.

Doctor Ramsey's knowledge of medicine and state association matters eminently qualifies him for the associate editorship. His office being in the Hume Mansur building, it is convenient for him to visit THE JOURNAL office and to assist the editor, Dr. E. M. Shanklin, in handling the ever-growing responsibilities of the editorial department.

Doctor Ramsey will write the "Medical Panorama" page in THE JOURNAL each month, and in special articles and editorials help keep JOURNAL readers informed of scientific and economic trends in medicine. In this connection he expects to attend all important meetings and conferences sponsored by the American Medical Association proper and its councils and bureaus.

THE INDIANA CANCER BULLETIN

FINAL arrangements are under way for the distribution of The Indiana Cancer Bulletin to all members of the State Medical Association during March. The bulletin, primarily a diagnostic manual, gives brief but authentic facts regarding early signs and symptoms of cancer. It is hoped that the bulletin will serve as a practical and convenient reference on the diagnosis of cancer for the busy practitioner. It will give the physician up-to-date information necessary for early diagnosis and stimulate his alertness in recognizing cancer.

The first contact with the cancer patient is in the office of the family physician. By his being continuously conscious of cancer, many cases may be diagnosed earlier and the odds for a cure greatly enhanced. The theme of the bulletin need not be enlarged upon: "When the patient is over forty, think of cancer first; when the patient is under forty, think of cancer, too."

The material contained in the bulletin was compiled by the Committee on Cancer of the Illinois State Medical Society for the physicians of that State. Reprints and distribution in Indiana have been made possible through the coordinated efforts of the Indiana State Medical Association, The Indiana State Board of Health, The Indiana University School of Medicine, and The Indiana Cancer Society, Inc.

As it is felt that the bulletin contains a wealth of practical and useful information, members are urged to watch for their copy, check its contents, and place it in their library where it will be easily accessible for reference.

The bulletin as originally distributed was in a loose-leaf form. This has necessitated following the same style in distributing the information in Indiana. The reprints, however, have been bound and indexed for the convenience of the reader. The bulletin, as being distributed, contains all the issues that have been released to this date. In the event that additional bulletins are issued, it is hoped that those being distributed now can be supplemented.

DEBUNKING PUBLIC RELATIONS*

ROLLEN W. WATERSON†

OAKLAND, CALIFORNIA

FACED with adverse legislation resulting from public misunderstanding and disapproval, doctors long ago called their colleagues together to consider the problem.

Soon we began to hear medical orators shouting, "The public must be informed. We need public education, a public relations program. Let's follow the lead of business and industry and hire top-notch publicity men. Let's mold public opinion. We'll buy ads in all of the newspapers and magazines. We'll blanket the nation with tons and tons of literature, telling our story. We'll buy time on the radio. We'll debate, give speeches. We'll lobby the legislature. We'll levy special assessments, raise lots of money. We'll change the public mind to *our* way of thinking."

Publicity men were hired. The money was raised, and millions have been spent. The propaganda was distributed. The speeches have been given. The ads have appeared in the national magazines and in the daily press. The radio time has been used. The debates have been heard. Public relations committees have been discharged, and others appointed. Experts have been fired and new ones hired, each with a different brand of public opinion-molding magic, each with a louder voice, or a faster typewriter, or a bigger and better crystal ball.

But that which is known as the "public mind" has not been changed. Bills establishing systems of state medicine are still perennial in the state and national legislatures. "Public opinion" polls still reflect the public desire for a change.

It is evident that these liberal doses of so-called public relations have not improved medicine's relations with the public.

It is therefore time to re-examine our concepts of "Public Relations." We must determine first of all the meaning of the term.

"Public" is a collective noun. It means "The people collectively."

Medicine's method for improving public relations has been to approach people collectively, to "mold public opinion," to "change the public mind."

But the people who comprise the public are individuals. They have individual minds, just as they have individual livers. You have never confronted a "public liver"; I find it equally difficult to envision a "public mind."

However, some quirk in our mass production thinking has made possible the concept of a "public liver," and even a "public liver" expert. Witness the mass liver therapy of Carter and his "little liver pills." The same quirk may be responsible for the concept of a "public mind," and a "public mind" expert. Witness the mass mind therapy of the self-styled public relations "experts" with their little propaganda pills. Every mind gets the same dose; every pill has the same ingredients.

Experience has taught medicine that one man's liver and its functions must be considered and treated differently from another's. Experience should be teaching medicine that one man's mind and its functions must be treated differently from another's. Physicians, above all people, should know the pitfalls of generalization, of mass therapy, of a collective, singular concept in the treatment and reactions of the organs of people, of which the mind is one.

Our first step in debunking what has passed for medical public relations must be a recognition of the dangerous fallacy of this "collective" view of the problem.

The Public doesn't cast a vote at the polls; Pete Brown and Mary Johnson vote their personal convictions. The Profession doesn't treat *The Public*; Doc Jones took care of Jim Hansen's little boy. *The Public* doesn't have economic relations with *The Profession*; Joe Blow got a whopping bill from Dr. Smith. *The Profession* doesn't have bad public relations; Mollie Glutch, Bill Jones, and millions of others are just dissatisfied with what thousands of separate and very singular doctors did to them, economically, scientifically, or both.

The "Public Relations" of the profession is merely the computation of the incidence of good and bad relations between individual doctors and individual people.

Public health, good or bad, is the health of individual people, added up. Public relations, good or bad, is the relations of individual people, added up.

You treat bad public relations like you treat public syphilis; one case at a time. If the nation's maternal mortality rate is too high, the work of a "public obstetrics" expert won't lower it except as he is able to educate and improve the work of the people who practice obstetrics.

Doctors decry impersonalized mass treatment in their field, yet they are everywhere busily applying impersonalized mass treatment in the public rela-

* Delivered before a meeting of the Association of American Physicians and Surgeons at Colorado Springs, Colorado.

† Executive Secretary of the Alameda County (California) Medical Association; former Executive Secretary of the Lake County (Indiana) Medical Society.

tions field. It won't work in medicine; it won't work in public relations.

Again—*and always*, let us remember that the public must be considered and treated as individuals.

Our next debunking excursion is into the realm of the "relations" part of "public relations."

In the first place, it just isn't feasible for us to hire someone to have our relations with others for us. It is a job we have to do ourselves. It's like making love; satisfactory results are obtained only when you do it yourself, even if you aren't an expert.

How, for example, are doctor-patient relations improved by the employed "relations expert" whose propaganda message is read by any one of the millions of people who have been the economic victims of doctors who leave the complexities of the financial aspect of medicine to untrained secretaries and greedy bill collectors?

Of what value is the expert's soft, compelling radio voice when it oozes into homes of people who have been impoverished by excessive medical fees?

What kind of result can your "relations expert" get when his words reach any one of the many millions of Americans who have been soured on medicine through their contacts with any one of the scores of patient-relations mistakes that are made each day in nearly every doctor's office?

Judged by sordid statistics supplied by a study of the nation's commercial collection agencies, the known proportion of disgruntled patients to satisfied ones is itself alarming. From one-fourth to one-third of the families in most cities in the nation have been hounded at one time or another by collectors for doctor bills.

There is no way of estimating the additional unknown number who escape this category by settling their medical accounts without coercion but with an active antagonism against medicine. Together these groups form a bloc that is a formidable obstacle to good public relations. The bloc was created by individual doctors; it can be removed only by individual doctors.

It is a fact that in most communities bill collectors handle a greater dollar-volume of accounts for physicians alone than for all other credit grantors combined. Delinquent medical accounts form the only factor in the economic life of the community which can be and often is the sole support of a commercial collection agency.

If this much economic difficulty with its customers became true of any commercial enterprise, it would mean failure for the enterprise. If this continues to be true of medicine, it will mean the usurpation of the economics of medicine by those who proffer the public the promise of better business management—by the government, the insurance companies, the hospitals.

Doctors of medicine have a billion dollar annual business relationship with their patients each year. But the only source of even partial information and education on the conduct of that business comes from a little throw-away (but excellent) trade journal—*Medical Economics*. There has been no "consumer research" into the business side of medicine. There has been no study of the reasons these millions of patients have business disagreements with their physicians, no delineation of the ways to prevent them.

How can we expect good relations in a business we know nothing about?

Here, truly, is the job which must be done—to learn prevention and cure of bad doctor-patient business relations, and to teach doctors what has been learned.

The actual improvement of these relations can be achieved only by the individual practitioners of medicine. This can't be done by an employed "expert," working apart from the doctor on the nonexistent "public mind." Friends of medicine just can't be made as fast as doctors are losing them through their ignorance of simple business practices and ethics.

So let's debunk the attractive idea that there is a short-cut to good public relations. You can't take an easy road by hiring a "relations expert" to have your relations with people for you. It just can't be done.

And, while we are in a debunking mood, let's debunk this one. You've heard this said: "Patients like their own doctors; it is the organized profession that is in public disfavor." Patients do like the doctors to whom they return again and again. But ask the next fifty people you see how many *other* doctors they dislike. Most of them will damn the entire medical profession—excepting their family doctor—because of actual unsatisfactory experiences with other *individual* doctors. Try as he may, individual practicing physicians cannot get out from under the full burden of responsibility for medicine's public relations.

Another popular fallacy that needs a thorough debunkng is that "publicity" and "public relations" are synonymous.

Anyone who confuses these terms knows nothing of the spirit and substance of public relations. Just as the physician immediately recognizes the work of a quack, the competent relations counsel immediately recognizes a novice or faker in his field. These quacks in public relations who call themselves experts hold out the promise that they can insure you against poor public relations and state medicine with their particular brand of publicity.

Like a massage or steam bath, publicity may make you feel better. It is pleasant to see your name in print and to read the nice things you have paid someone to say about you. But the publicity masseur too often keeps his ailing client from competent hands until it is too late. His work, like that of the physiotherapy cults, may be prescribed as a necessary *part* of a public relations program, but when publicity is offered as the cure-all of

public *relations*, it becomes a dangerous cult. And this is the cult from which organized medicine has accepted its counsel and advice.

Medicine has had its publicity massage; but it still has ailing public relations.

It is an obvious fact that the publicity man believes there is only one party to a relation.

In public relations, however, we leave to the psychiatrists those people who have relations with themselves.

In public relations, we interest ourselves in normal relations—to which there are two parties, at least. When there is a break in such a relationship, we examine both parties; in this case, the public *and* medicine, the patient *and* his doctor.

Publicity men lay all the blame on the public; their clients are never wrong, never subject to change. They work only to change the public mind. The public relations man is less popular with his client because his diagnostic methods are more scientific and include an examination of *both* his client and the public.

Any qualified (but courageous!) public relations counsel who might be called upon to assist the medical profession in the diagnosis and treatment of its present public relations dilemma will proceed as follows:

(1) He will analyze the medical profession to determine if and wherein it fails to deliver the best possible service, fairly priced, conveniently available, pleasantly and honestly given. Because medical care is a necessity of life, he will determine whether it is universally available at the place and time it is needed; whether, in availing himself of its benefits, undue financial burden is placed upon the patient. He will examine every contact of every physician with every patient, every contact of medical organizations with the public. In short, he will take a history and examine his patient.

(2) He will analyze the public to learn its expectations of, and reactions to, the medical profession.

(3) He will establish a diagnosis, on the basis of the foregoing dual history and examination.

(4) He will institute the treatment indicated.

(a) Therapy for the medical profession will not be of the passive, painless variety, but a dramatic recovery can reasonably be predicted *if* the orders are followed. But the physician must learn that, in this case, he is the patient, and he must follow orders, not blindly, but with understanding. Every attempt must be made by the public relations counsel to bring the profession to an understanding of the underlying reasons for and results to be expected from each phase of the treatment; if the patient is not cooperative, however, and cannot understand that treatment for public relations ills, like medicine, is not always palatable, the public relations counsel has failed. He will then lose a patient to the publicity man, and medicine will probably lose its freedom.

(b) Therapy for the public, to be instituted when the medical profession has responded favorably to treatment. Here the public relations counsel brings in the publicity masseur to change the public mind, to assist him in revealing a *changed* and more acceptable medical profession to the smiling public, and frankly and honestly to explain away public misunderstandings of the profession (changing the public!) which were discovered in the original history and examination of the public. This is the (comparatively) small, but important part publicity plays in a public relations program; publicity is *not* public relations. Alone, in medicine's present problem, publicity is a cult; used with discrimination in its proper relation to a public relations program, it is efficacious and essential to the achievement of good public relations.

This kind of public relations diagnosis and treatment was described to and accepted by the members of the Alameda County Medical Association when I became their executive secretary two years ago. It was copied from my report to them; it is interesting to note that Raymond Rich Associates, who never saw that report, have duplicated this method in their recent recommendations to the Colorado Medical Association.

In our own program we have faltered and we have made mistakes, but we have also made significant progress. Our study in Alameda, San Francisco, and Santa Clara counties, of thousands of cases of unsatisfactory physician-patient relations will be completed early next year. From this we will be able to tell the profession the frequency of occurrence of more than two hundred reasons for patient dissatisfaction. We will soon be able to tell the story of how these ailing doctor-patient relationships, which add up to *bad* public relations, can be prevented and how they *have* been prevented in the offices of physicians in many types of practice. Financed in part by the California Medical Association, these studies will, we hope, form the background for further "consumer research" in the thus far little-understood billion-dollar business aspect of medicine.

We are learning how to give the public protection from excessive fees. We have advertised and are delivering medical care to everyone in our area, regardless of inability to pay. We are promoting our voluntary health insurance plans. We have in operation a plan to protect the public from incompetence and unnecessary care in our approved hospitals. We have removed the bill collector from the physician-patient economic relationship. We are doing many other things to provide the background for good public relations, but we have not yet been able to convert all of our own members. When we have, we'll be well on the way to providing a pattern for good medical public relations.

Our greatest need has been reliable, outside confirmation of the validity of our ideas of sound public relations. Our individual members, upon

whom this concept of public relations places the heaviest burden and the largest responsibility, have observed that we seemed to be alone in the nation in our ideas as outlined in this paper. And indeed we were, until the recent appearance of the Raymond Rich Associates report to the Colorado Medical Association. We are sending a copy of that report to each of the 900 members of our county society. I urge you to read it, to sense the soundness of the public relations philosophy that lies behind it. You will not agree with every detail, nor do I, but you will find in it what I believe is a substantial foundation for good relations with the public.

And now, to summarize this paper:

1. There is no "public mind." *People* have opinions; the *public* doesn't. Mass treatment is not only ineffectual; it is dangerous.

2. Employed experts can't have relations with people *for* you. Nothing on earth can make people like you while you are doing things they dislike. The profession can get help to learn what to do to build satisfactory relations, but doctors themselves will have to do the building.

3. Organized medicine didn't acquire bad public relations just because it was organized medicine. It has public disfavor because it represents all of the doctors with whom individuals have had bad relations—and there are more of them than you think.

4. Public Relations and Publicity are no more synonymous than are scientific medicine and physiotherapy. You can no more cure every public relations ill with publicity than you can cure every human ailment with physiotherapy.

5. There are two parties to a strained and unsatisfactory relationship. Medicine needs to put its own house in order before it can make permanent changes in the public thinking.

In conclusion: Common sense points the way to good public relations for medicine. The primary requirement is that the individuals who comprise medicine—all physicians—earn good relations with the individuals who comprise the public—all patients. There is no short-cut, no easier way.

Medicine will have made its first step toward the acquisition of good public relations only when doctors learn from progressive thinkers within their ranks that the best guide to desirable medical public relations will be found in their own code of ethics. Thoroughly and completely debunked, public relations is, in every sense, nothing more nor less than fundamental human relations.

QUANTITATIVE SEROLOGY AND SYPHILIS*

Part I—Meaning of Qualitative and Quantitative Tests

Carl C. Kuehn, M.D.
Samuel R. Damon, Ph.D.
INDIANAPOLIS

REPORTS on routine serologic tests for syphilis made in the laboratory of the Indiana State Board of Health are now rendered in terms of "positive," "doubtful" and "negative"—instead of 4+, 3+, 2+, 1+, and negative (—). The advent of this change has caused a profound amount of confusion in the minds of many practitioners. After considerable discussion with individuals and groups throughout the state of Indiana, it has been determined that those who are confused had been attempting to read quantitation into what was actually a qualitative report. They apparently did not realize that the interpretation of the results of routine qualitative tests for syphilis is entirely different from that of quantitative tests. At the suggestion of the Committee on Venereal Disease Control of the Indiana State Medical Association, it will be our aim to attempt clarification of this situation and to do so in nontechnical language.

THE QUALITATIVE TEST

The routine tests for syphilis are essentially qualitative in nature, whether they be based upon a complement fixation (e.g. Wassermann, Kolmer, et cetera) or a flocculation technic (e.g. Kahn, Mazzini, et cetera). The substance in syphilitic serum which produces a reaction in these tests is called "reagin" and the presence of "reagin" is detected by means of "antigen" for which the "reagin" has an affinity. In performing these qualitative tests, notation is made merely of the intensity of reaction between a certain amount of the patient's serum and a certain amount of the antigen—and not of the quantity of reagin present.

POSITIVE REACTIONS—whether in a complement fixation (Wasserman), or in any of the numerous flocculation tests, imply that there was no doubt in the mind of the technician interpreting the reaction between the antigen and the patient's serum. Such reactions are very definite and a qualitative test stops right here. These reactions do not give any indication of how much syphilitic antibody, or reagin, was present in the patient's serum. They indicate only that the reaction was of rather high grade. If the physician desires to know *how positive* the reaction was, it is necessary for him to

* This is the first of a series of three articles on Serology in Syphilis, which will appear in three consecutive issues of The Journal.

request a quantitative laboratory examination specifically. *Any quantitation deduced from results of qualitative tests reported in terms of degrees of reactivity is totally erroneous, as no routine serologic test is quantitative in any sense.* Such a method of reporting is due solely to custom, rather than to its intrinsic value and *cannot be too strongly discouraged.*

NEGATIVE REACTIONS—obviously mean that there was either no reagin present in the patient's serum to react with the antigen, or that the sensitivity of the technic was such that if present, it could not be detected.

DOUBTFUL REACTIONS—are those which give the technician, as well as the physician, the most trouble, since they are of a low grade character and fall within the zone between those which are definitely positive on the one hand, and those definitely negative on the other hand. In this narrow zone of reactions reported "doubtful," where an attempt is made to indicate varying degrees of reaction by numerical values, two technicians reading the same group of tests will almost invariably differ in their readings regardless of how perfectly they agree in reading frankly negative and frankly positive tests. These reactions cannot be ignored, however, by either the laboratory worker or the doctor.

THE INTERPRETATION OF THE DOUBTFUL REPORT

The *doubtful* report embraces the entire category of results intermediate between those frankly *negative* and those frankly *positive*. Such a report from a reliable laboratory may indicate actual syphilitic infection, though the serum in such a case contains only a small quantity of reagin—not enough to give a clear-cut positive reaction even with whole serum—yet enough to be demonstrable in some degree. Given such a report, there are several possibilities to be considered by the physician: first, it is obvious that every syphilitic individual with a definite positive serologic test has passed through a period soon after infection, when reagin was first beginning to appear in his serum. At this time his blood test would have been *doubtful*. In other words, many syphilitics would certainly be missed if *doubtful* reports were continually ignored. Likewise, under treatment, the level of syphilitic reagin usually falls until it is just below the amount necessary for a definite *positive* reaction, yet is still present in sufficient quantity to give intermediate or *doubtful* results. Every seropositive patient rendered seronegative by treatment must necessarily pass through such a stage. Furthermore, there are a large number of patients who, in spite of any amount of treatment, retain this minimal amount of reagin, and give persistently *doubtful* reactions, with possibly occasional reports of negative or positive. There is no reason to doubt that such patients who repeatedly give these partial, incomplete, or *doubtful* reactions may be as definitely syphilitic as those with persistently positive serum tests.

It must be admitted, however, that a doubtful or perhaps even a positive report is sometimes obtained in the complete absence of syphilis, due either to technical factors, or to some condition of the patient other than syphilis. The incidence of such false reactions varies greatly, but the nature of the laboratory technics is such that they cannot be avoided and any such report should be regarded as a clue rather than as a diagnosis. In patients not previously diagnosed as syphilitic, such reports call for a careful examination of history and clinical conditions, familial or contact investigation, and repeated serologic tests over a period of a few months. If subsequent tests are negative in the absence of antisyphilitic treatment and clinical examination is also negative, the original report may be ascribed to technical idiosyncrasies of the test employed. On the other hand, if in the absence of antiluetic treatment a series of reports such as *doubtful, positive, positive, doubtful,* is obtained upon testing at intervals of two or three weeks, and if a somewhat more sensitive technic gives consistently *positive* results, the indications are that the original doubtful report was due to the presence of syphilitic reagin, and thus, syphilitic infection.

QUANTITATIVE TESTS

There are occasions when it is desirable and good clinical practice to know the level of positivity of a patient's serum. This is determined by means of quantitative tests which should be performed only on serums giving definitely positive reactions in one of the routine qualitative procedures and consist in performing the test on the serum in serial dilution for the purpose of showing the greatest dilution which will give a definite reaction. Only separately performed quantitative tests can give information regarding changes in level of positivity from time to time, and their use as aids in the treatment and control of syphilis will be discussed in a later article.

SUMMARY

1. Routine qualitative serologic tests are performed on *whole serum only* and detect the presence of syphilitic reagin, but not its quantity.

2. Numerical values (1+, 2+, 3+, 4+) assigned to routine qualitative results are in no way quantitative since they indicate only the intensity of reaction, *doubtful* reports being made usually on the basis of specimens reacting at a 1+ or 2+ level, and positives at a 3+ or a 4+ level.

3. To determine the diagnostic significance of a single *doubtful* and even a *positive* or *negative* report it is necessary that the patient's clinical history and condition be very critically examined. When in doubt, it is usually advisable that final decision await results of repeated laboratory tests over a period of time (two to three months).

4. A quantitative serologic test is indicated only in cases of sera which gave positive reactions in the routine qualitative test, and is performed on the serum in serial dilution for the purpose of determining the greatest dilution which will still give a definite reaction. It indicates the level of positivity of the specimen.

Voice of Medicine

547 Ridge Avenue,
Lawrenceburg, Indiana,
January 23, 1948.

The Editor,

The Journal of the Indiana State Medical Association,
1017 Hume Mansur Building,
Indianapolis, 4,
Indiana

Dear Sir:

It was with sorrow that I read the article "Planned Parenthood—The Road to National Health and World Peace," by C. O. McCormick, M.D., in the January 1948 issue of THE JOURNAL of the Indiana State Medical Association. My sorrow was that such an outpouring of a Godless philosophy of life should take up space in a scientific journal. The question discussed is not medical but moral.

In order to answer Dr. McCormick it is necessary to go back to the fundamental facts concerning man and his relationship to God and to the world. Man was created by God to know Him, to love Him, and to serve Him in this world so that he may be happy with Him for all eternity in heaven. Thus we see that this world is but a temporary proving ground for man and that his true and permanent home is in heaven.

God, in creating man and the world, established certain natural laws to govern all created things. The sun and the stars and the winds and the tides all behave in accordance with the rules laid down by their Creator. Only man, insignificant man, dares to tamper with the work of an all-knowing God.

It is illogical, unscientific, and unjustifiable to blame all of the ills which beset man—poverty, hunger, sickness, and strife—on an increasing birth rate. The difficulty is not that man has multiplied too rapidly, but that he has refused to be governed by the laws of God and the teachings of His Divine Son, Jesus Christ.

If all men were to obey the Ten Commandments and abide by the natural law, all of our ills would disappear and nations could live side by side in peace and contentment. If Dr. McCormick is truly concerned about the woes that beset man, let him devote himself to the study of means of increasing the world output of food and other material necessities. Can it be that men who have accomplished veritable miracles in the production of machinery, who have split the atom, will be unable by diligent study to devise means to provide the essentials of life to an increasing population? I do not think so! I have too much faith in God and in man.

If a manufacturer has difficulty in supplying the demand for his product, he does not kill off the people whom he cannot supply. No. He exercises ingenuity, employs scientists, to devise means of increasing production. We too must increase production of essentials necessary to sustain an increasing population.

We have become too materialistic, and consequently have lost our sense of perspective. We no longer see ourselves in our true relationship with the whole of creation and with our Creator. From this mental and moral blindness have our difficulties stemmed.

All through history both ancient and modern nations which have defied the natural law, who have worshipped false gods, have perished. Can we not learn from the past? We should remember that man is composed of both a body and a soul, and that only the body is the result of a union between man and woman. The soul is infused by Almighty God Himself. Can anyone who has looked upon a dying person deny the existence of a soul? The dramatic change which occurs in a human being at the moment of death should convince even the skeptic. That which was man has become a corpse, yet everything that was present during life is still there. The material composition of the body is the same. Only the soul has left to go on to its just reward or punishment.

Now, if man is the result of a combination of the creative efforts of God and man, are we justified in an attempt to frustrate the creative urge of the Originator of the Universe? We are not!

If we really believe in God as the Creator of the World we will be content to live according to the natural law and to abide by the commandments of God, trusting in Him to aid us in the solution of any problems which may confront us. We need humble prayer—not "planned parenthood."

Sincerely yours,
F. A. STRECK, M.D.

Medical Panorama by the Associate Editor

The MONTANA State Medical Association recently adopted the Rocky Mountain Medical Journal as its official journal. This well appointed publication is now in its forty-fifth year. It is published in Denver and was originally devoted entirely to Colorado medicine. It was originally titled "Colorado Medicine," and after including a "Wyoming Section" in 1925, it soon added the support of the Utah State Medical Association and was appropriately named after the region which it was serving. In 1944 New Mexico was added to its supporters and now, with the inclusion of Montana, the journal represents the medical profession of the Rocky Mountain tier of states from the Mexican to the Canadian border.

The editor points out in the magazine's original five-state issue that the combined membership of the states concerned does not equal that of many single state associations. In fact, it is less than that of New York County Medical Society. At the same time the geographical area covered is tremendous. It seems fitting that this fine publication should be chosen to represent the profession in an area which must present many problems peculiar to the terrain and to the distribution of population in these five states.

———S I M A———

The Journal of the MISSOURI State Medical Association reviews briefly and takes some degree of comfort from a statistical study by Reginald Fitz, Archives Internal Medicine, 76:210 (October) 1945. The study furnishes information relevant to the questions: Is cardiovascular disease an occupational hazard peculiar to physicians? and Are doctors dying earlier now than formerly?

The author's conclusions are reported as follows: "Year by year more physicians reach the age of 60. The total number living beyond 60 is increasing steadily and a greater number reaches 70 and 80.

"Though vascular disease, a common cause of death among physicians, is increasing in frequency, the relative number of deaths from all causes is diminishing. The reduced mortality, especially noticeable in those less than 40, is perceptible in those beyond 60. If deaths from cardiac, renal and cerebral vascular diseases are grouped, physicians between 40 and 60 years of age appear to die a little more commonly from these causes than do members of the general white male population, probably because they have a better chance of avoiding earlier death from other causes. Fitz believes as the profession grows larger and older, mortality from vascular disease will increase."

The CONNECTICUT State Medical Society and the Connecticut Pharmaceutical Association have maintained a Joint Conference Committee since 1941. It was formed for the purpose of maintaining a liaison group for the study of problems common to both professions, and to improve professional relations.

Since its organization the committee has campaigned actively among the members of both professions against the practice of printing and using prescription blanks bearing the name of a pharmacy or pharmacist. Recently the Connecticut State Pharmacy Commission published a regulation which prohibits pharmacists from furnishing such prescription blanks.

The Connecticut State Medical Journal reports cooperation on the part of most of the physicians, and expresses approval of the entire program on the ground that physicians, who do not advertise their own services, should not be intrigued into an advertising scheme for others.

———S I M A———

The Bulletin of the COLUMBUS (Ohio) Academy of Medicine editorializes in a common-sense fashion concerning the multitude of types of information blanks which insurance companies are submitting to physicians. Suggestions are made in regard to the possibility of having a standard set of forms, approved by the insurance companies and by various medical associations. Special note is made of the need of a standard form for the reporting of an illness or accident.

The annoyances connected with completing a blank requesting such irrelevant information as: When was the patient able to go out of doors for the first time? At what hour was the operation performed? How many visits have you made at his home?, and others ad infinitum are clearly brought to mind by the editorial.

It is pointed out that several of the good insurance companies have simple forms which may be easily filled out, and which apparently furnish all the data necessary for the processing of claims. On the other hand, the Columbus editor suspects that other companies make use of complicated and tricky forms to invalidate claims and to avoid payment.

Certainly the use of standardized and simplified forms would save many hours of time and, what is more important, would save many a temper which would otherwise be worn raw by an exasperating type of insurance blank.

What's Going On In Indiana by the Executive Secretary

What Your Journal Costs. The total cost of producing the state medical JOURNAL in 1947 was $39,373.79, which was $1,814.91 more than the year before. Up to 1948 THE JOURNAL received $2.00 per member from the state dues, but it was raised to $3.00 January 1, 1948, by Council action. The largest source of JOURNAL income, of course, is from advertising. The advertisers make THE JOURNAL possible, a fact which physicians should remember when they spend their dollars. The twelve issues of the 1947 JOURNAL cost $9.60, or 80 cents a copy. We quote these figures, for by doing so we are trying to say nicely, "You ought to read it."

——ISMA——

A.M.A. Session in Chicago. Among the hundreds of sound reasons why Indiana physicians should attend the next annual session of the American Medical Association, June 21-25, 1948, two are outstanding ones: (1) The meeting will be in nearby Chicago, and (2) Dr. Roscoe L. Sensenich, of South Bend, will be inaugurated as president, the third Hoosier doctor in medical history to attain this honor. Now is the time to make your hotel reservation. Application blanks are now appearing in *The Journal of the American Medical Association,* or you may write direct to Dr. Fred H. Muller, chairman, Subcommittee on Hotels, 105 West Madison Street, Room 1707, Chicago 2, Illinois. You are requested to give five hotel choices. It would be wise to write for reservations now. You may cancel them later if you find it impossible to attend.

——ISMA——

Have You Heard from Mr. Kourenhoff? The Indianapolis Better Business Bureau reports that Mr. Paul M. Kourenhoff, of San Francisco, is sending literature to Indiana doctors offering for sale medical publications and cure-alls for arthritis and other diseases. In the fall of 1946 Mr. Kourenhoff was cited by the post office authorities to show cause why a fraud order should not be issued against him, and he agreed to discontinue the questionable business. Any physician getting literature from this man is requested to send it, plus any letters and the envelopes in which it came, to the Better Business Bureau, 930 Lemcke Building, Indianapolis 4, Indiana.

Medals for Scientific Exhibitors. The Executive Committee has voted to present gold, silver and bronze medals for the three best scientific exhibits at the 1948 state session. The winners will be selected by a committee appointed by the president. This is being done to encourage more and better scientific exhibits. Appropriately, the medal will bear the likeness of Dr. Frank B. Wynn, of Indianapolis, originator of the scientific medical exhibit. Doctor Wynn's exhibit was premiered at the annual state medical association session in Lafayette in 1898. Afterward, the Indiana medical association granted Doctor Wynn $300 expense money so that he might show his bacteriological and pathological specimens at the A.M.A. meeting in Columbus, Ohio, the next year. A storeroom was rented for the exhibit as the A.M.A. made no provision for scientific displays at that time. Now, fifty years after this Indiana physician developed the idea of teaching through visual exhibit, he is to receive deserved recognition.

——ISMA——

No Section Meetings This Year. Section meetings will not be held during the 1948 annual session. The Council, in voting to deviate from the long-established policy, accepted the recommendation of the Reference Committee on Sections and Section Work. The chairman of this reference committee told the House of Delegates at French Lick last October: "The consensus of opinion is that we are getting overloaded with sections and that it would be nice if we could have a unity session with speakers selected by each of the sections, and everybody meet in one unit for one year and try it out." As a consequence, general scientific meetings will be held Wednesday afternoon and all day Thursday. This will give all physicians an opportunity to hear the top-flight speakers. These outstanding men, most of whom come a long distance and at a great personal sacrifice, will not have the feeling their time is being wasted, for they will talk to a large audience. The Council will watch the reaction to this trial innovation in the state program with keen interest.

News Notes

Dr. Basil Byrne has located in El Paso, Texas, for the practice of his profession after spending the last two years in postgraduate work at Chicago and Indianapolis.

Dr. Henry J. Faul, of Evansville, has accepted the duties of temporary director of the Evansville City-County Health Department. He was appointed by the members of the Health Board and has agreed to serve until a full-time director can be found.

Dr. E. A. King recently resigned as medical director of the Evansville City-County Health Department in order to enter private practice.

After one year of industrial medical work following his release from the United States Army, Dr. R. M. Hansell has opened an office for general practice in Indianapolis.

Dr. Oliver M. Hitch, of Indianapolis, has opened an office in Green Bay, Wisconsin, for the practice of ophthalmology.

After finishing a year as resident physician at St. Mary's Hospital in Evansville Dr. Noel L. Neifert has opened an office in Tell City.

Dr. Keith Sloan has opened an office in Paducah, Kentucky, where he will be associated with his brother, Dr. Gene Sloan, in the general practice of medicine. Doctor Keith Sloan was formerly of Madison.

The Madison County Board of Commissioners recently selected Dr. W. L. Sharp, of Anderson, as Madison County Health Officer. This appointment followed the resignation of Dr. E. M. Conrad, who held the post for several years.

Dr. George A. Vail is now associated in the practice of medicine and surgery with Dr. J. M. Pfeifer, of Lawrenceburg.

Recently returned from nineteen months' service with the Army Medical Corps in Japan, Dr. Charles Y. Knowles has opened an office in Indianapolis for the practice of medicine.

Dr. and Mrs. N. K. Forster, who moved to California from Hammond in early January, have left La Jolla for Los Angeles, where they purchased a home. Their address is 1339 N. Capri Drive, Pacific Palisades, Los Angeles, Calif.

Appointment of Dr. M. W. Kemp as superintendent of the Madison State Hospital, to succeed Dr. Charles A. Zeller, was announced recently by the hospital board of trustees. Doctor Zeller has been transferred to Logansport, where he will serve as superintendent of the state hospital there.

All physicians in Michigan and surrounding states and provinces are invited to attend the **Second Annual Michigan Postgraduate Clinical Institute** convening Wednesday, Thursday, and Friday, March 10-12, in Detroit. The Institute features lectures by forty-nine outstanding Michigan clinicians and teachers who will cover in their discussions a complete review of latest medical scientific findings. There is no registration fee. Hotel reservations may be obtained by writing E. C. Texter, M.D., Chairman of the Committee on Hotels, 1005 Stroh Building, Detroit.



Dr. Roscoe L. Sensenich, of South Bend, President-elect of the American Medical Association, received automobile license "MD 1" from Indiana Secretary of State Thomas Bath. Indiana is awarding physicians "MD" classification license plates for the first time this year.

Dr. Philip Hennessee, of Indianapolis, is now associated in the practice of surgery with Dr. Donald E. Spahr, in Portland.

A Middle Section Meeting of the American Laryngological, Rhinological and Otological Society, Inc., was held in Columbus, Ohio, on January 19. Indiana participants in the program were: J. Jerome Littell, M.D., of Indianapolis, Kenneth L. Craft, M.D., of Indianapolis, and Bert E. Ellis, M.D., of Indianapolis.

The United States Army Medical Department has announced the availability of opportunities for advanced training and experience in the various special fields of medicine and surgery in overseas Army hospitals. These hospitals are registered with the American Medical Association, and this training may be acceptable by the specialty board as part of the period usually required to be spent in limited practice and experience prior to admission for examination. Interested members of the medical profession who have completed the formal training requirements for certification in one of the special fields are eligible to apply for these positions. Eligible physicians should communicate with the Surgeon General, U. S. Army, Washington 25, D. C., for further information.

Announcement has been made of the association of Dr. William E. Sutton with Dr. Ernest Rupel, at 419 Hume-Mansur Building, Indianapolis, in the practice of urology.

The American Board of Ophthalmology makes the following announcements:

Practical Examinations—1948: Baltimore, May 20-25; Chicago, October 6-9. Written Qualifying Tests will be held annually, probably in January of each year. Applicants for the January, 1949 Written Qualifying Test must be filed with the Secretary before July 1, 1948.

A supplement of diplomates from January, 1947-January, 1948 will be sent gratis to all purchasers of the Board's Directory. This supplement is arranged alphabetically and geographically. No biographical material is included. Diplomates are urged to keep the Board office informed of all changes of address, so that the files can be kept up-to-date.

The **Michigan State Medical Society** is sponsoring a one day Conference on **"Modern Diagnosis and Treatment of Venereal Diseases"** in the Detroit Intensive Treatment Center, Herman Kiefer Hospital, Detroit, Saturday, March 13. Members of all medical societies in Indiana and surrounding states have been invited to attend. There is no registration fee. Hotel accommodations may be obtained by writing E. C. Texter, M.D., Chairman, Committee on Hotels, 1005 Stroh Building, Detroit 26, Michigan.

Following his release from the Army in December, 1947, Dr. John W. Karn has opened an office in South Bend for the general practice of medicine.

Two national conferences in Chicago in February attracted a number of Indiana physicians.

Dr. F. S. Crockett, of LaFayette, chairman of the Committee on Rural Medical Service, American Medical Association, presided at a National Conference on Rural Health February 6 and 7. Dr. Edward C. Elliott, former president of Purdue University, spoke at the luncheon on the second day. Hoosier physicians at the conference included Dr. Cleon A. Nafe, Dr. L. E. Burney, Dr. Dan C. Barrett, all of Indianapolis; Dr. Jesse E. Ferrell, of Fortville; Dr. James Googe, of Valparaiso; Dr. George L. Derhammer, of Brook; Dr. Charles Maxwell, of Terre Haute; and Dr. Luke Frame, of Washington.

The following Indiana physicians attended the National Conference on Medical Service February 8: Doctor Nafe; Dr. Crockett; Dr. Roscoe L. Sensenich and Dr. A. S. Giordano, both of South Bend; Dr. John D. Van Nuys, Dr. J. William Wright, Dr. Bert Ellis, Dr. C. H. McCaskey, Dr. Frank Ramsey, Dr. Karl R. Ruddell and Dr. Lester D. Bibler, all of Indianapolis; Dr. Claude S. Black of Warren, and Dr. Herman M. Baker of Evansville. Doctor Nafe, a member of the executive committee of the conference, served as chairman of the nominating committee.

Establishment of a number of teaching and research fellowships in the field of tuberculosis by the **National Tuberculosis Association** has been announced by Dr. Esmond R. Long, director of the NTA's Division of Research. The action was recommended by the executive committee of the NTA's medical section, the American Trudeau Society.

Annual stipends for the fellowships will range from $2,400 to $3,200, according to Dr. Long. Provision will also be made for laboratory fees and incidental expenses of like character.

The fellowships will be limited to graduates of American schools for teaching and investigation in the United States. While preference will be given to applicants with a Doctor of Philosophy or Doctor of Medicine degree, fellowships will not be restricted to the holders of these degrees.

Applications will be considered in the fields of pathology and bacteriology, clinical medicine, epidemiology and social and statistical research. Applicants may elect the institutions in which they wish to study.

Persons interested in obtaining a fellowship should write to Dr. James E. Perkins, managing director, National Tuberculosis Association, 1790 Broadway, New York 19, N. Y., for further information.

The Sixth International Assembly of the **International College of Surgeons** will be held in Rome, Italy, at the invitation of the Italian Government, during the week of May 16-23, 1948, under the presidency of Professors Raffaele Bastianelli and Raffaele Paolucci of Rome, and Mario Dogliotti of Turin. The Secretary of the Assembly is Prof. Giuseppe Bendandi of Rome. Attendance is not limited to the membership of the College. All surgeons in good standing in their medical organizations are invited. Scientific meetings, scientific and commercial exhibits, visits to the Universities of Turin and Milan have been arranged, together with tours to other medical centers in Europe. Detailed information may be obtained from Dr. Max Thorek, General Secretary, 850 Irving Park Road, Chicago 13.

Dr. Wendell C. Anderson has assumed his duties as director of the cancer control activities of the Indiana State Board of Health, in Indianapolis. He has recently returned from Buffalo, New York, where he took a postgraduate course in cancer control at Roswell Park Memorial hospital.

Dr. Anderson was one of the first medical directors of health departments for the State Board of Health, having assisted in organizing health departments and serving as medical director at Huntingburg, LaPorte, Rockville and Valparaiso.

From 1942 to 1946, he was on leave of absence with the U. S. Armed Forces, serving 30 months overseas. He was base malariologist in New Guinea and Netherlands, East Indies, and was with the 31st Division during the Philippine campaign. He served as preventive disease medical officer at Leyte. While in Sydney, Australia, he took postgraduate training in tropical medicine at the University of Sydney.

Dr. Leonard A. Scheele, who will succeed Dr. Thomas Parran April 6, 1948, as Surgeon General, is a native of Fort Wayne. He took his medical training at Wayne University College of Medicine at Detroit, graduating in 1934. In the spring of 1946, Doctor Scheele addressed the health officers' conference in Indianapolis.

The new head of the U. S. Public Health Service has been director of the National Cancer Institute since last July. Forty years old, he will be the youngest Surgeon General in history. During the war he was assigned to the Army and achieved a splendid record in Italy and later with the Supreme Headquarters of the Allied Expeditionary Forces.

READ YOUR I.S.M.A. JOURNAL

Three dollars of your state association annual dues constitute your subscription to your state Journal. The sum hardly pays for the paper upon which the Journal is printed, because much of the cost comes from the advertisers, and you rightly may brag about your association's publication being one of the two or three most outstanding in the entire United States.

However, do you read it from cover to cover every month? Be thrifty. Get more than your money's worth. Aside from the Annual Year Book and the Convention Number, each issue is ram-packed with interesting data which you cannot afford to miss if you wish to keep abreast and up to date. A mere glance at the table of contents is but an idle gesture. The scientific papers are first class. The editorials are worth your effort. The associate editor's and the executive secretary's pages tell you what is going on in this and other states. The news notes may say something about a friend or buddy. The record of transactions of the council, the executive committee, and other committee reports all are informative. Even the Woman's Auxiliary page is interesting.

Finally, read what the advertisers have to say and patronize them when you can.

—Reprinted from the Tippecanoe County Medical News Bulletin.

INDIANA UNIVERSITY NEWS NOTES

"**Alumni Day**" will be observed by the Indiana University School of Medicine on Wednesday, May 5, with all graduates to be invited to return to the Indianapolis campus on that date.

Arrangements for the affair are being completed by a general committee of alumni and representatives of the senior class, with Dr. J. Neill Garber, Indianapolis, as chairman. Subcommittees are being named to arrange various features of the day's activities. Tentatively scheduled are a general session, clinics, a luncheon followed by a varied afternoon program, and closing with a dinner and dance.

This will be the first time that all graduates of the medical school have held a reunion on the campus and an attendance of several hundred is anticipated.

A postgraduate course on malignant diseases has been announced by the Indiana University School of Medicine. The two-day program, scheduled for Wednesday and Thursday, April 7-8, is sponsored by the medical school with the cooperation of the Indiana Cancer Society.

Deaths

Mabel M. Teague, M.D., of Indianapolis, died January ninth at the age of seventy-eight. A graduate of the Eclectic Medical College of Indiana, in Indianapolis, in 1893, Doctor Teague retired after fifteen years of practice.

Arthur T. Fagaly, M.D., of Lawrenceburg, died on February eleventh, at the age of seventy-seven. He was a graduate of Miami Medical College of Cincinnati, in 1893. He was an honorary member of the Dearborn-Ohio County Medical Society and the Indiana State Medical Association, and was a Fellow of the American Medical Association.

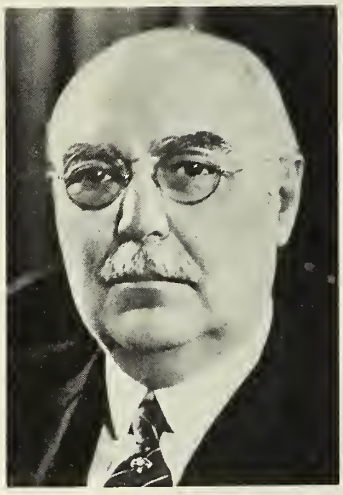
John C. Boone, M.D., of South Bend, died on January eleventh at his home after three years' illness. He was eighty-two years of age. Doctor Boone was a graduate of the University of Louisville School of Medicine in 1895. He had practiced medicine for fifty years, the last twenty-nine having been spent in South Bend. Doctor Boone served in World War I as a captain in a base hospital in France and was also a veteran of the Spanish American War. He was an honorary member and past president of the St. Joseph County Medical Society, and was also an honorary member of the Indiana State Medical Association and the American Medical Association.

Clifford W. Conkling, M.D., of Windfall, died on January thirteenth at the age of seventy-eight. Doctor Conkling was a graduate of the Pulte Medical College, of Cincinnati in 1900, and had practiced in Windfall since that time.

Calvin H. English, M.D., of Fort Wayne, died February fourth after an illness of two years. He was ninety years of age. Doctor English was a graduate of the Fort Wayne College of Medicine in 1884. He was an honorary member of the Allen-Jasper County Medical Society and the Indiana State Medical Association, and a member of the American Medical Association.

Alfred W. Hadley, M.D., of Indianapolis, died on January sixteenth at the age of seventy-four. A graduate of the Indiana University School of Medicine in 1910, Doctor Hadley had practiced medicine in Indianapolis for twenty-six years. He served as a lieutenant colonel in the Medical Corps in World War I. Doctor Hadley was a member of the Tippecanoe County Medical Society, the Indiana State Medical Association and the American Medical Association.

Josiah Kirby Lilly, chairman of the board of directors of Eli Lilly and Company, died on February 8, 1948. He was 86 years old. Mr. Lilly was born in Greencastle, Indiana. His father, Colonel Eli Lilly, founded the company on May 10, 1876. Josiah Kirby, as "a boy with a wicker basket," delivered the first pound of a Lilly product to a near-by wholesale druggist. He was then 14 years old. In 1880, he entered the Philadelphia College of Pharmacy and Science, from which he graduated in 1882. Upon returning to Indianapolis he became superintendent of the plant, in which capacity he continued for about sixteen years. When Colonel Lilly died in June, 1898, his son was elected president of the company. After thirty-four years as president, Mr. Lilly became chairman of the board of directors in 1932. He retired from active service with the company on January 1, 1945. Under his management Eli Lilly and Company became one of the outstanding organizations in the pharmaceutical field, with international distribution.



John P. Ramsay, M.D., of Vincennes, died on January twenty-second after fifty-eight years of medical practice, fifty of which were spent in Vincennes. He was eighty-five years of age. Doctor Ramsay graduated from the Medical College of Ohio, in Cincinnati in 1889. He was an honorary member of the Knox County Medical Society and the Indiana State Medical Association, and a member of the American Medical Association.

Virgil W. French, M.D., retired physician of Riley, died at Terre Haute on December ninth, at the age of fifty-six years. He had practiced medicine in Terre Haute from 1921 until 1924, before going to Riley to practice. He was a graduate of Indiana University School of Medicine, in 1921, and was a member of the Vigo County Medical Society, the Indiana State Medical Association and the American Medical Association.

"The most satisfactory results . . ."

IRRITABLE BOWEL SYNDROME

"Therapeutic efforts toward the relief of constipation in patients with an irritable bowel syndrome must be continued over prolonged periods of time. Cathartics which exert their action by direct irrigation of the intestinal mucosa have no place in long-term bowel management. . . . The most satisfactory results were obtained with a hydrophilic mucilloid [Metamucil] prepared from psyllium seed. . . ."*

METAMUCIL

When prolonged treatment is indicated, Metamucil—the "smoothage" management of constipation—fits well into the program.

Smooth, gentle, normal evacuation—the desired action in the irritable bowel syndrome—is afforded by the use of Metamucil.

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Metamucil is the highly refined mucilloid of Plantago ovata (50%), a seed of the psyllium group, combined with dextrose (50%) as a dispersing agent. Metamucil is the registered trademark of G. D. Searle & Co., Chicago 80, Illinois.

*Dolkart, R. E.; Dentler, M., and Barrow, L. L.: The Effect of Various Types of Therapy in the Management of the Irritable Bowel Syndrome, Illinois M. J. *90*:287 (Nov.) 1946.

SEARLE RESEARCH IN THE SERVICE OF MEDICINE

Society Reports

INDIANA STATE MEDICAL ASSOCIATION

THE COUNCIL

January 18, 1948

The Council of the Indiana State Medical Association convened for its midwinter meeting at 10:35 A.M., Sunday, January 18, 1948, in Private Dining Room No. 3 of the Columbia Club, at Indianapolis. In the absence of Dr. Alfred Ellison, chairman, due to illness, on motion of Drs. C. J. Clark and C. S. Black, Dr. A. M. Mitchell presided.

Roll call showed the following present:

Councilors:

First District—Herman T. Combs, Evansville
Second District—Not represented
Third District—William H. Garner, New Albany
Fourth District—Not represented
Fifth District—A. M. Mitchell, Terre Haute
Sixth District—W. U. Kennedy, New Castle
Seventh District—C. J. Clark, Indianapolis
Eighth District—E. H. Clauser, Muncie
Ninth District—Wemple Dodds, Crawfordsville
Tenth District—W. H. Howard, Hammond
Eleventh District—C. S. Black, Warren
Twelfth District—Paul A. Garber, South Whitley
Thirteenth District—Not represented

Officers:

Floyd T. Romberger, Lafayette, president 1947.
Cleon A. Nafe, Indianapolis, president 1948.
Augustus P. Hauss, New Albany, president-elect.
A. F. Weyerbacher, Indianapolis, treasurer.

Executive Committee:

C. H. McCaskey, Indianapolis, chairman.
W. L. Portteus, Franklin.
Albert Stump, attorney.
Ray E. Smith, executive secretary.

Guests:

Charles N. Combs, Terre Haute, chairman, Committee on Centennial Celebration and History.
Bert E. Ellis, Indianapolis, chairman, and
Roy A. Geider, Indianapolis, vice-chairman, Committee on Convention Arrangements.
Herman M. Baker, Evansville, chairman, Committee on Medical Education and Hospitals.
J. Neill Garber, Indianapolis, chairman, Committee on Public Relations.
F. S. Crockett, Lafayette, delegate to the American Medical Association.

On motion of Drs. Garber and Combs, the minutes of the Council meetings held at French Lick on October 28 and 30, 1947, were approved as printed in the December, 1947, issue of THE JOURNAL.

Reports of Councilors

Councilors reported their districts active and functioning, with meetings scheduled as follows:

3rd District—May 26, French Lick
5th District—June 2, Hotel Grant, U.S. 40, Greencastle
6th District—May 12, Shelbyville
7th District—May 4, Indianapolis
9th District—May 13, Frankfort
11th District—May 19, Wabash
12th District—May 4, Chamber of Commerce, Fort Wayne
13th District—November 10, South Bend

Dr. Clark discussed the matter of multiplicity of meetings and the requirement of the hospitals that a physician sign his name, answer roll call, or in some manner record his attendance at meetings, to which the doctors object. He stated that this is a dictum laid down by the A.M.A. Council on Medical Education and Hospitals, as follows, "Minutes of staff meetings and attendance records shall be kept by the secretary," saying he knew of nothing that could be done about it unless the matter is taken to a higher level. However, at the request of the Seventh District Medical Society, he called the matter to the attention of the Council for any action the Council might wish to take. Following discussion by Drs. McCaskey, Nafe and Mitchell, Dr. Garber made the motion that the matter be turned back to the local society as this is purely a local situation in which the Council has no jurisdiction. This motion was seconded by Dr. Black, and carried.

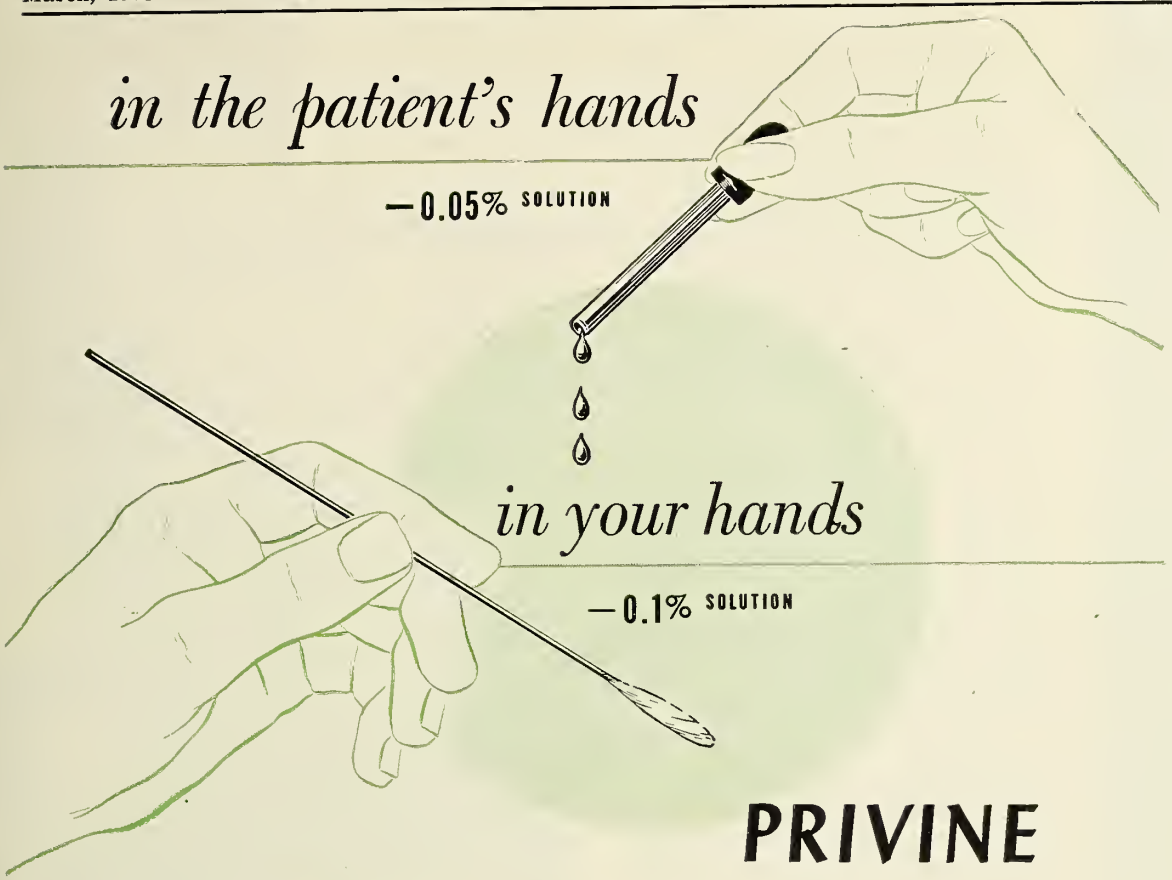
Reports of Officers

Dr. Floyd T. Romberger, president 1947. "I don't know that I have anything in particular to report. I am satisfied in my own mind that with your mature judgment and excellent management the affairs of this association will be well conducted throughout the years. One thing I would like to amplify a little bit—that part of my presidential address concerning the addition of a vice-president and a speaker of the House of Delegates. I have known every past president of this association for more than twenty-five years—have known what they have gone through, and I am not asking this for myself but for the future years. The affairs of this association are far more complex today than they were fifteen years ago and will become increasingly so in the next fifteen. Last year Dr. Nafe most graciously accepted some of the responsibility. The problems which I visualize for our association are far more reaching even than that, and, if you have a president, a vice-president, a speaker of the house, and an executive secretary, then you will have four top-flight men to respond to and attend any and every district or local or state-wide meeting that is to be held in the entire state. In addition you have thirteen councilors and eighty-three county society presidents, all equally informed on state association affairs and willing to work.

(Continued on Page 330)

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Privine hydrochloride, 0.1 per cent, fills the need for an agent which will produce the intense vasoconstriction frequently necessary for adequate visualization and for pre- and post-operative shrinkage. It is therefore the Privine preparation of choice for direct use in the office or hospital.

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PRIVINE (brand of naphazoline) • *Trade-mark Reg. U. S. Pat. Off.*

(Continued from Page 328)

"As far as politics are concerned . . . socialized medicine . . . to me there is no difference between Mr. Wallace and Mr. Truman and Mr. Taft. All three are alike. They seek votes. Their programs differ only in degree of viciousness to our profession.

"If the association is to go on at its best, then we need absolute solidarity of organization. My association with this Council has extended most happily over a period of eighteen years, during which time I have not missed a meeting. The memories are quite pleasant indeed. I am glad to have been of service and hope to be of further service as time goes on."

Dr. Cleon A. Nafe, president, spoke of the committee appointments he had made and of the fact that he had appointed several new committees. "Particularly there is the Committee on Constitution and By-Laws. Dr. Romberger introduced some resolutions or recommendations that should be in the form of amendments to the Constitution and By-Laws, so it becomes the duty of this committee to prepare these amendments for presentation to the House of Delegates for action this fall. Next thing I want the Council to consider is the advisability of bringing the Constitution and By-Laws up to date, possibly rewriting some of it. I would like some instructions from the Council since there were no instructions from the House of Delegates." (Dr. Black moved that Dr. Nafe's suggestions be accepted as a motion and that the Committee on Constitution and By-Laws be asked to prepare any proposed amendments, or new amendments, to the Constitution and By-Laws for submission to the House of Delegates at the next annual session. This motion was seconded by Dr. Garber, and carried).

"I also have appointed a Committee on School Health and Physical Education, with Dr. Portteus as chairman. . . . I suggest that this be embodied in the By-Laws, 'That the president appoint such standing committees as outlined in the By-Laws, and such other committees as authorized by the Council or the House of Delegates.'

"The Committee on Centennial Celebration has been changed to the Committee on Centennial Celebration and History. I hope that meets with your approval. The Anti-Tuberculosis Committee has been changed to Committee on Tuberculosis. I also have appointed a Committee on Heart Disease to act as a liaison committee with the new Indiana Heart Foundation. . . .

"The president is called upon to do a number of things that he has no authority to do. I have been asked to appoint a liaison committee for the Mutual Medical Insurance Company. I hope that has the approval of the Council. I also have appointed another committee that I think is most important—the Committee on Public Relations—and I want to present Dr. Neill Garber, chairman of that committee."

Dr. Clark moved acceptance of Dr. Nafe's report and that the Council instruct the president to appoint a committee to act in liaison with Mutual Medical Insurance, Inc., and that in the future any new committee be countenanced by the Council before appointment. This motion was seconded by Dr. Garber, and carried.

Dr. Augustus P. Hauss, president-elect. "I would consider it rather presumptive if I made any recommendations in this report. I feel that I am now occupying the part of an apprentice and I am very happy to have as my preceptor Dr. Nafe. With all due respect to all the presidents that the Indiana State Medical Association has had, I feel that no man in Indiana is more worthy and qualified to be president than is Dr. Nafe. I will be happy to work along with him and do everything I can to help. I especially want to watch him and learn to take on the responsibilities that have been given me. I do want to thank the Council for my pleasant association and the friends I have made and the wonderful experience I have had.

"I am very happy to report at this time that the Third District Medical Society met a few weeks ago and unanimously elected Dr. William H. Garner councilor. You know Dr. Garner. He served previously on the Council, and I am sure that you will agree with me that he is worthy of the job and will fill it well."

Dr. Hauss' report was accepted on motion of Drs. Clark and Kennedy.

Dr. A. F. Weyerbacher, treasurer, presented the following report which was compiled by George S. Olive and Company, certified public accountants, and which was accepted on motion of Drs. Clark and Garber:

Treasurer's Report

January 12, 1948

The Council,
Indiana State Medical Association,
Indianapolis, Ind.

Gentlemen:

We have examined the accounts and financial records of the Indiana State Medical Association for the year ended December 31, 1947, for the purpose of determining and verifying the assets, liabilities, and fund balances at December 31, 1947, and of reviewing the income and expense accounts for the year ended on that date on the basis of cash received and disbursed. In connection therewith, we have reviewed the system of internal control and the accounting procedures of the Association and, without making a detailed audit of the transactions, have examined and tested accounting records of the Association and other supporting evidence, by methods and to the extent we deemed appropriate.

In our opinion, subject to the comments made herein, the accompanying statement of assets, all funds, and related statements of income and expense, on the basis of cash received and disbursed, present fairly the position of the Indiana State

INSEPARABLY RELATED

"Now that we know the chemical nature of most of these compounds [internal secretions], and have learned much about their physiological activities, endocrinology has become an exact science, or branch of science, *inseparably related* to physiology, pharmacology and biochemistry."

Cameron, A. T.: Recent Advances in Endocrinology, ed. 5, Philadelphia. The Blakiston Company, 1945, p. 1.

The ever-widening scope of hormone therapy is the outcome of decades of progress in laboratory research, clinical investigation and pharmaceutical manufacture.

SCHERING

world's largest manufacturer of sex hormones has pioneered in noteworthy developments in this field.

Further advances in endocrine treatment foreshadowed by current scientific activity are inseparably related to the continuing initiation of effective, well-tolerated therapeutic agents.



Schering CORPORATION • BLOOMFIELD, NEW JERSEY

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Medical Association at December 31, 1947, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

General Comment

In exhibit A is presented an analysis of the increase in assets of the Association for the year ended December 31, 1947, showing in summary form the sources from which this increase was derived.

The increase of $11,029.96 resulted principally from an excess of operating cash receipts over operating cash disbursements of the general fund. Increases in the general fund are due mainly to additional income from membership dues. Additional United States Savings bonds in the amount of $5,000 were purchased for the general fund. A complete analysis of the increases and decreases in the general fund is presented in exhibit C.

Details of the assets of all funds are presented in exhibit B. There were no recorded liabilities at December 31, 1947, and the assets shown represent the surplus of each fund at that date. We have examined securities of the Association, which are kept in the Association's safe deposit box in the Indiana National Bank. Cash on deposit in banks was confirmed by direct correspondence with the depositories.

Analyses of the cash receipts and disbursements of the general fund, of The Journal of The Indiana State Medical Association, and of the Medical Defense fund are presented in exhibits C, D, and E.

Yours very truly,
Geo. S. Olive & Co.
Certified Public Accountants

Exhibit A

INDIANA STATE MEDICAL ASSOCIATION
Analysis of Increase in Assets, All Funds, Year Ended December 31, 1947

TOTAL ASSETS, DECEMBER 31, 1947—Exhibit B		**$67,572.35**
TOTAL ASSETS, DECEMBER 31, 1946		**56,542.39**
NET INCREASE		**$11,029.96**
Arising from the following sources:		
Excess of operating cash receipts over operating cash disbursements, general fund, year ended December 31, 1947:		
Receipts—Exhibit C	$59,105.00	
Disbursements—Exhibit C	53,138.95	
	$5,966.05	
U. S. Government bonds purchased	5,000.00	
		$10,966.05
Excess of operating cash receipts over operating cash disbursements, The Journal of the Indiana State Medical Association, year ended December 31, 1947:		
Receipts—Exhibit D	$39,800.95	
Disbursements—Exhibit D	39,373.79	
		427.16
Excess of operating cash disbursements over operating cash receipts, Medical Defense fund, year ended December 31, 1947:		
Receipts—Exhibit E	$ 2,936.75	
Disbursements—Exhibit E	3,300.00	
		(363.25)
TOTAL NET INCREASE		**$11,029.96**

Exhibit B

INDIANA STATE MEDICAL ASSOCIATION
Statement of Assets, All Funds, at December 31, 1947

GENERAL FUND:			
Cash on deposit—Exhibit C		$11,579.30	
Petty cash fund		200.00	
Investments:			
Marion County Flood Prevention bonds	$3,000.00		
Indianapolis City Hospital bonds	5,000.00		
U. S. Treasury bonds	8,000.00		
U. S. Savings bonds	15,000.00		
		31,000.00	
Total general fund			$42,779.30
THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION:			
Cash on deposit—Exhibit D			6,872.58
MEDICAL DEFENSE FUND:			
Cash on deposit—Exhibit E		2,920.47	
Investments:			
Marion County Flood Prevention bonds	2,000.00		
U. S. Treasury bonds	5,000.00		
U. S. Savings bonds	5,000.00		
U. S. Baby bonds	3,000.00		
		15,000.00	
Total Medical Defense fund			17,920.47
TOTAL ASSETS, ALL FUNDS—Exhibit A			$67,572.35

Exhibit C

INDIANA STATE MEDICAL ASSOCIATION
Comparative Statement of Cash Receipts and Disbursements,
Years Ended December 31, 1947, and December 31, 1946

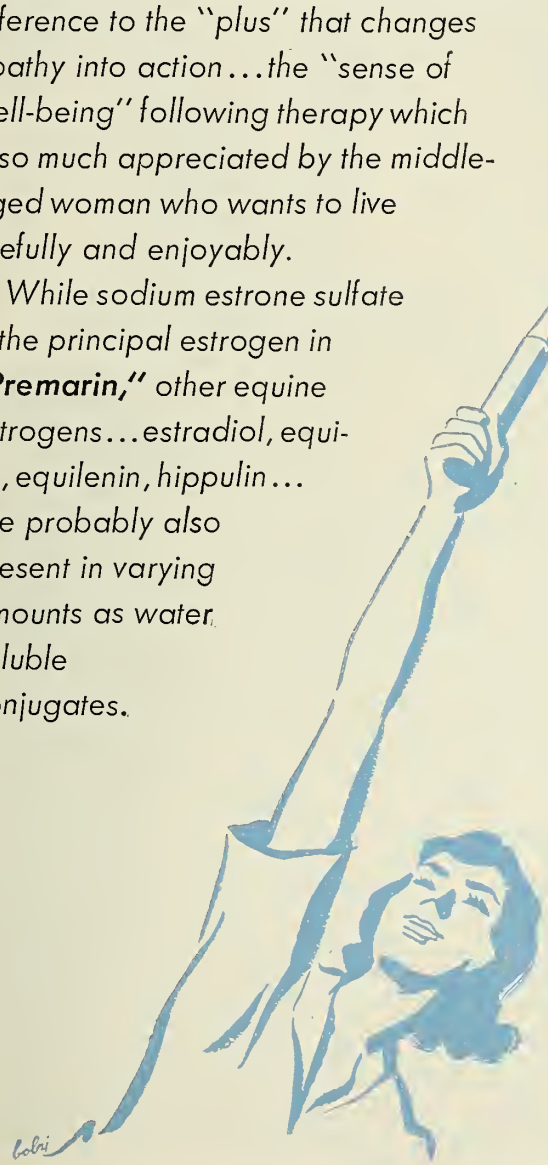
	Year Ended Dec. 31, 1947	Dec. 31, 1946	Increase (Decrease)
CASH BALANCE AT BEGINNING OF YEAR	$ 5,613.25	$ 1,028.92	$ 4,584.33
RECEIPTS:			
Membership dues	50,115.00	35,776.00	14,339.00
Income from exhibits	6,886.25	9,926.00	(3,039.75)
Interest income:			
U. S. Treasury bonds	212.50	290.65	(78.15)
U. S. Savings bonds	250.00	125.00	125.00
Indianapolis, Indiana, City Hospital bonds	200.00	200.00	

middle age + verve

Verve or apathy in middle age? For the menopausal patient this is usually determined by the degree of relief from the distressing symptoms so often associated with declining ovarian function.

Gratifying and prompt remission of disturbing symptoms may be obtained with **"Premarin."** *Outstanding among comments made by patients receiving this naturally occurring, orally active estrogen, is the reference to the "plus" that changes apathy into action...the "sense of well-being" following therapy which is so much appreciated by the middle-aged woman who wants to live usefully and enjoyably.*

While sodium estrone sulfate is the principal estrogen in **"Premarin,"** *other equine estrogens...estradiol, equilin, equilenin, hippulin... are probably also present in varying amounts as water soluble conjugates.*



Three potencies of **"Premarin"** *enable the physician to fit the dosage to the individual needs of the patient: 2.5 mg., 1.25 mg. and 0.625 mg. tablets; also in liquid form, 0.625 mg. in each 4 cc. (1 teaspoonful).*

Conjugated Estrogens (equine)

ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

"PREMARIN"®

Ayerst

Ayerst, McKenna & Harrison Limited

22 East 40th Street, New York 16, N. Y.

Marion County, Indiana, Flood Prevention bonds	127.50	127.50	
Meyer Nurse Scholarship fund	600.00		600.00
Krannert Nurse Scholarship fund	400.00		400.00
Refunds on annual session	306.25		306.25
Travel refunds		113.14	(113.14)
Check written off	7.50		7.50
Reimbursements from American Medical Association		72.41	(72.41)
	59,105.00	46,630.70	12,474.30
BEGINNING BALANCE PLUS CASH RECEIPTS	64,718.25	47,659.62	17,058.63
DISBURSEMENTS			
Transfer of applicable portion of dues to The Journal of The Indiana State Medical Association—Exhibit D	7,198.00	6,980.00	218.00
Medical Defense fund —Exhibit E	2,586.75	2,515.50	71.25
Purchase of securities	5,000.00		5,000.00
Headquarters office expense	14,563.37	13,499.43	1,063.94
Publicity committee	771.59	1,834.98	(1,063.39)
Public policy	2,513.67	325.99	2,187.68
Council	6,392.10	6,702.41	(310.31)
Officers	915.78	474.05	441.73
Annual session	6,834.76	6,700.03	134.73
Miscellaneous committees	4,312.17	1,756.31	2,555.86
Federal old age benefits tax	76.88	85.65	(8.77)
Instructional expense	191.77	15.63	176.14
Refunds of dues		372.00	(372.00)
National Conference on Medical Service	7.63	585.98	(578.35)
Payments for American Medical Ass'n		72.41	(72.41)
Refunds on exhibit rent	31.25	126.00	(94.75)
Fifty-Year Club	1,143.23		1,143.23
Woman's Auxiliary of The I. S. M. A.	600.00		600.00
	53,138.95	42,046.37	11,092.58
CASH BALANCE AT END OF YEAR	$11,579.30	$5,613.25	$5,966.05

Exhibit D

INDIANA STATE MEDICAL ASSOCIATION
Statement of Cash Receipts and Disbursements, Year Ended December 31, 1947
The Journal of the Indiana State Medical Association

BALANCE, JANUARY 1, 1947		$6,445.42
RECEIPTS:		
Subscriptions—members—Exhibit C	$7,198.00	
Subscriptions—non-members	451.50	
Advertising	31,386.60	
Collections on accounts receivable	62.00	
Single copy sales	255.40	
Electrotypes	157.45	
Miscellaneous	290.00	
Total receipts—Exhibit A		39,800.95
		46,246.37
DISBURSEMENTS:		
Salaries	10,917.75	
Printing	24,790.34	
Office postage	280.36	
Journal postage	647.49	
Advertising commissions	281.10	
Electrotypes	689.54	
Reporting	171.75	
Press clippings	191.68	
Editor and editorial board expense	154.65	
Office supplies	393.79	
Rent	480.00	
Electricity	34.13	
Telephone and telegraph	207.65	
Federal old age benefits tax	69.31	
Miscellaneous	64.25	
Total disbursements—Exhibit A		39,373.79
BALANCE, DECEMBER 31, 1947—Exhibit B		$6,872.58

Exhibit E

INDIANA STATE MEDICAL ASSOCIATION
Statement of Cash Receipts and Disbursements, Year Ended December 31, 1947
MEDICAL DEFENSE FUND

BALANCE, JANUARY 1, 1947		$3,283.72
RECEIPTS:		
Transfer of applicable portion of dues from the general fund—Exhibit C	$2,586.75	
Interest income:		
U. S. Treasury bonds	140.00	
U. S. Savings bonds	125.00	
Marion County Flood Prevention bonds	85.00	
Total receipts—Exhibit A		2,936.75
		6,220.47
DISBURSEMENTS:		
Malpractice fees	1,500.00	
Attorney fees	1,800.00	
Total disbursements—Exhibit A		3,300.00
BALANCE, DECEMBER 31, 1947—Exhibit B		$2,920.47

Dr. C. H. McCaskey, chairman, Executive Committee. "The Executive Committee recommends to the Council that the 1949 state meeting be held beginning Tuesday, October 4, instead of at a later date, as we have been holding the annual sessions.

"We feel it was quite an honor to have Dr. Jake Oliphant to place third in the A.M.A. contest for the certificate of distinction award for the outstanding general practitioner in this country.

"*Election of directors of Mutual Medical Insurance, Inc.* The By-laws of Mutual Medical Insurance, Inc., contain the following provision regarding the election of directors:

'Only members of this Corporation shall be eligible to become members of the Board of Directors. Other requirements as to eligibility shall be determined by the Board of Directors. A majority of the Board shall always be members of the medical profession who, as long as the

Remember in 1932 we brought out Pablum?

A new concept of cereal nutrition, easy of preparation, non-wasteful, fore-runner of present-day widely practised principles of food fortification—remember?



Now we have gone a step further in Pabena, similar in nutritional and convenient features to its father-product, Pablum, different in flavor because of its oatmeal base. If our pioneer work and ethical conduct meet with your approbation, remember, please, to specify Pablum and Pabena.

Mead Johnson & Company, Evansville, Indiana, U.S.A.

Medical Association is willing to exercise this function, shall be approved by said Association as representatives of organized medicine in the State of Indiana. The Indiana State Medical Association shall be afforded the opportunity to make recommendations for membership on the Board of Directors as to physicians; and the approval of the said Association, as long as the Association is willing to discharge this function, shall be necessary for one to qualify as a member of the Board. The physician members of the Board shall be so selected, in accordance with the recommendation and approval of the Association, as to demonstrate the purpose and design of having on the Board a widely democratic representation of the entire profession. Opportunity shall also be afforded to lay groups or representatives of any interests the Board may desire to have represented on the Board.'

"The Executive Committee recommends instead of naming successors for the exact number who are retiring, that you select up to twelve men over the state and then let the Board of Directors choose from these twelve men. This will give a broader representation of men in the medical association.

"*Woman's Auxiliary.* The Woman's Auxiliary to the Indiana State Medical Association has asked for funds from the state association as they feel they cannot operate on their dues. Last year we gave them $600.00 for their little paper. Then Dr. Hauss gave them $79.00 out of his fund at French Lick. The Executive Committee decided to recommend to the Council that the association allow them fifty cents a member up to 1,600 members, or $800.00. That will make it possible for them to operate smoothly without raising their dues."

Dr. Hauss explained that one of the purposes of the additional appropriation for the Woman's Auxiliary is to defray expenses of publication of their monthly bulletin. In view of this, he recommended that $800.00 be allowed, on the basis of fifty cents per member for 1,600 members, thirty-five cents of each fifty cents to be used for publication of the bulletin, and the balance for other operating expenses.

Dr. McCaskey accepted this recommendation as part of his report, and the report was approved on motion of Drs. Clark and Combs.

Dr. Clark moved that "the Council be directed to submit names today for membership on the Board of Directors of Mutual Medical Insurance, Inc., to the Council and that the Council act as a committee as a whole, each individual member being free to submit names as he sees fit." Motion seconded by Dr. Dodds.

Following discussion by Dr. Kennedy and Mr. Stump, Dr. Clark amended his motion to the effect that "the president of the state medical association be authorized and directed to appoint a committee of three to nominate twelve proposed directors, from which Mutual Medical Insurance, Inc., may select its directors, and that this committee endeavor to make the nominations as representative of the state association geographically as possible." Dr. Black seconded this amended motion and it was passed.

In accordance with the above action the committee appointed by the president presented the following names for consideration of the Board of Directors of Mutual Medical Insurance, Inc., and possible election to that board:

R. R. Calvert, LaFayette
M. C. Topping, Terre Haute
Harry P. Ross, Richmond
Will Thompson, Liberty
W. U. Kennedy, New Castle
Walter Portteus, Franklin
A. P. Hauss, New Albany
C. S. Black, Warren
J. E. Ferrell, Fortville
Jack E. Pilcher, Indianapolis
Marlow W. Manion, Indianapolis
Paul Garber, South Whitley

On motion of Drs. Howard and Combs this report was accepted.

Ray E. Smith, executive secretary, in reporting on THE JOURNAL said, "Printing costs are up again this year. We are trying to hold down other expenses.

"A lot of my time is spent with other organizations. I attend a number of luncheons and a number of meetings with groups in the city. We have made a gain of 200 in membership in the last two years. Other activities have been taken on—nursing and medical school scholarships, Fifty-Year Club. Despite the larger volume of work, the headquarters staff has been able to handle it by working harder."

Report accepted on motion of Drs. Clark and Black.

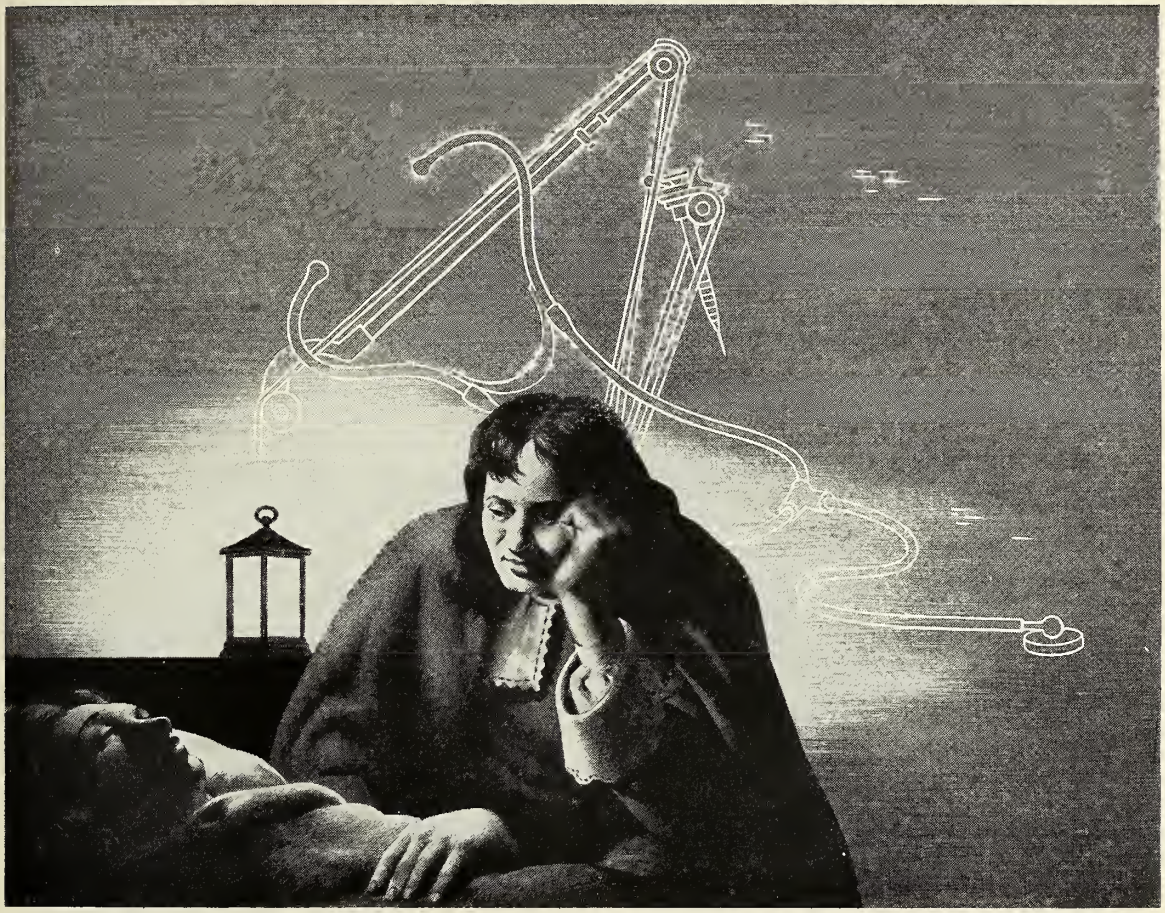
Dr. F. S. Crockett, delegate to the A.M.A., reported on the Cleveland interim session, held January 5 and 6, 1948. (See pages 224 through 226, February JOURNAL).

Unfinished Business

1. *Report of Committee on Medical and Nursing School Scholarships.* Dr. Clark, chairman, reported that all medical and nursing scholarships had been placed and all of the students are doing satisfactory work with the exception of one student nurse who failed to make first term grades. This scholarship will be awarded to another girl this year. On motion of Drs. Garber and Combs this report was accepted.

Following discussion, on motion of Dr. Clark the Council approved setting aside an amount equivalent to one nurse scholarship as a loan fund to be drawn on by senior nursing students who are in need of small amounts of money for short periods of time, subject to repayment. Hospital superintendents are to be notified that such a fund exists; it is not to be publicized otherwise.

2. *Progress of Mutual Medical Insurance, Inc.*



The First Modern Practitioner

Medicine and Dentistry were rescued from stagnant *generalizations* about disease by the English Puritan, Thomas Sydenham (1624-1689)—just as his ex-pirate assistant, Tom Dover, rescued Robinson Crusoe (Alexander Selkirk).

Sydenham first *observed and described specific and distinct diseases:* scarlet fever, measles, gout, malaria, dysentery, etc. With cool drinks for the smallpox victim, iron for anemia or sedatives for needed rest, he ended a war on *symptoms* and allied the profession with nature—to help the body *heal itself!*

So there were more good doctors in the next century. But the British Common Bench ruled in 1767 that neither their eminence nor good motives were sufficient defense against charges of malpractice or negligence; that a patient yielded no rights in submitting to treatment; that definitions of "skill" and "due care" varied with circumstance.

Doctors Since 1899 have not had to rely solely upon the inadequate defenses of eminence or good motives. They have safeguarded their time, money and reputations with The Medical Protective policy—for *complete* protection, *preventive* counsel and *confidential* service.

THE MEDICAL PROTECTIVE COMPANY

FORT WAYNE, INDIANA

Professional Protection EXCLUSIVELY . . . *since 1899*

FORT WAYNE Office: Robert F. Reiman, Representative, 229 W. Berry Street, Telephone Anthony 9103

INDIANAPOLIS Office: Kenneth W. Moeller, Representative, 1112 Hume Mansur Bldg., Telephone Riley 1013

Dr. Kennedy, president of Mutual Medical Insurance, Inc., reported as follows:

"The insurance company is going along in its usual smooth tenor, gaining in coverage and in income, in claim payments and in financial solidarity. The claims paid in December amounted to $53,000.

"As of January 1 there were 141,000 persons covered by our policies, the net gain in December being 5,100. Larger gains are expected in January as, after eight months of negotiations, we signed up one company with an expected coverage of 6,000. There are many such negotiations pending but many months are usually required to close the large contracts.

"We prefer a constant fairly even growth rather than faster overgrowth which does not permit adequate reserves to be set up. Financial solidity and actuarial solvency has been paramount in our policies of operation.

"We are particularly happy that we have been able to repay the loans from our doctors, for without their generous support we could not have even started.

"Experience is demonstrating that constant readjustments will be necessary during the early years of our existence. We are making such readjustments as rapidly as data can be assembled on which to base them."

This report was accepted on motion of Drs. Clark and Dodds.

3. *Clarification of motion passed at October 28, 1947, Council meeting regarding prorating of dues.* This motion, which is as follows, "Physicians applying for membership during the first nine months of the year will pay $15.00; dues for those who join after October 1 will be $5.00" is to apply only to new members. THE JOURNAL is to receive $1.00 of the $5.00 collected from new members who join late in the year, and seventy-five cents out of each of these memberships is to be deposited in the medical defense fund. This action was taken on the motion of Drs. Garber and Black.

1947 Annual Session at French Lick

Dr. Hauss, co-chairman of the Committee on Convention Arrangements for the 1947 annual session at French Lick, reported that out of an appropriation of $3,000 for entertainment expenses, $2,688.59 was spent, leaving a balance of $311.41, which had been refunded to the treasurer of the association.

On motion of Drs. Clark and Black, Dr. Hauss' report was accepted, with a vote of thanks from the Council.

Suggestions and Proposals for 1948 (99th) Annual Session at Indianapolis

1. *Dates set by Executive Committee*—Tuesday, Wednesday and Thursday, October 26, 27 and 28, 1948.

2. *Convention headquarters*—Murat Temple.

3. *Report of Convention Arrangements Committee.* Dr. Ellis, chairman, presented a detailed report covering the following points:

(a) Committee on Convention Arrangements suggests that a public meeting be held on Wednesday evening, with a layman of national renown being invited to speak, the speaker to be preceded by musical entertainment such as a glee club.

(b) It is proposed that the annual banquet be held in the Egyptian Room of the Murat Temple and that the program following the banquet be held in the same room.

(c) It is proposed that a charge of $1.00 per plate be made for the usual Tuesday evening stag party, to help defray the increased cost of food and entertainment.

Dinner for attending women physicians will be arranged for Tuesday evening.

After these parties a show will be given in the theater to which all members and convention guests will be cordially welcome.

(d) *Budget.* The Convention Arrangements Committee requests an allowance of $3,500 for convention entertainment expenses, contingent upon the charge of $1.00 per plate for the stag party.

Dr. Clark moved that this report be accepted with the additional proviso that up to $2.00 per plate be charged for the stag party. This motion was seconded by Dr. Howard and carried.

4. *General and section meetings.* On motion of Drs. Howard and Black, the Council approved of having general scientific meetings only during the 1948 session.

5. *Scientific exhibit.* On motion of Drs. Black and Clark, a scientific exhibit is to be held this year.

6. *General outline of program*, including the foregoing suggestions, follows:

Monday, October 25, 1948

Meeting of health officers.
Executive Committee dinner and meeting.

Tuesday, October 26, 1948

Morning —Registration.
Instructional courses.
Annual golf tournament.
Skeet and trap shoot.
Editorial Board meeting.
Afternoon—Council meeting.
Meeting of House of Delegates.
Instructional courses.
Evening —Smoker and stag party.
Dinner for women physicians.

Wednesday, October 27, 1948

Morning —General scientific meeting.
Noon —Class and fraternity get-togethers and luncheons.
Veterans' luncheon.
Afternoon—General scientific meeting.

(Continued on Page 340)

Must

INCREASED IRRITATION

follow

INCREASED SMOKING?

PEOPLE are smoking heavily . . . far more than ever before. To *minimize* nose and throat irritation due to smoking, may we suggest the cigarette *proved** definitely and measurably less irritating . . . PHILIP MORRIS.

This proof of PHILIP MORRIS superiority is dependent *not only* upon laboratory evidence, but on clinical observation as well. Research was conducted *not by anonymous investigators, but by recognized authorities* . . . and published in leading medical journals.

The fact is PHILIP MORRIS advantages result directly from a *distinctive method of manufacture* described in published reports.

**Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154; Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60; Proc. Soc. Exp. Biol. and Med., 1934, 32, 241; N. Y. State Journ. Med., Vol. 35, 6-1-35, No. 11, 590-592.*

PHILIP MORRIS

PHILIP MORRIS & CO., LTD., INC.
119 FIFTH AVENUE, N. Y.

TO THE PHYSICIAN WHO SMOKES A PIPE: We suggest an unusually fine new blend — COUNTRY DOCTOR PIPE MIXTURE. Made by the same process as used in the manufacture of Philip Morris Cigarettes.

(Continued from Page 338)

Evening —Special dinners, committees, class groups, et cetera.
Public meeting.

Thursday, October 28, 1948

Morning —General scientific meeting.
House of Delegates meeting.
Final Council meeting.

Afternoon—General scientific meeting.
Annual dinner.

Membership Report

Indiana State Medical Association
December 31, 1947

County Society	No. M.D.'s in* County	Members Dec. 31, 1947	Members Dec. 31, 1946	Loss— Gain	Eligible Non-Members	New Members	Removed and Retired	Deceased	Ineligible
1st District									
Posey	15	13	13				2	1	
*Vanderburgh	204	164	161	3	23	13	14	5	4
Warrick	18	12	13	—1	1		5	1	
Spencer	13	9	7	2	2		1	1	
Perry	12	10	11	—1	1			1	1
Gibson	27	27	26	1		2	3		
Pike	11	8	9	—1			3	1	
Total	300	243	240	3	27	15	28	10	5
2nd District									
*Knox	57	46	45	1	6	2	6	3	1
Daviess-Martin	29	24	22	2	3	2	1	2	
Sullivan	23	19	19		1	1	5	1	
Greene	21	18	20	—2	1			2	
Owen-Monroe	46	44	42	—2	2	2		1	
Total	176	151	148	3	13	7	12	9	1
3rd District									
Lawrence	27	24	23	1		2	4		
Orange	13	13	11	2		1	1	1	
Crawford	5	5	6	—1			1		
*Washington	10	10	9	1			1		
Scott	8	5	5				2	2	
Clark	29	25	24	1	1	3	2	1	1
*Floyd	41	37	38	—1	1	2	4	3	1
Harrison	9	8	8		1		1		
*Dubois	20	18	17	1	2	2		2	
Total	162	145	141	4	5	10	16	9	2
4th District									
Bartholomew-Brown	39	32	33	—1	2	1	3	1	3
Decatur	19	16	16				5		
Jackson	19	18	18			1	1		
*Jennings	8	8	6	2		1	1		
Ripley	14	12	12		2				
Jefferson	28	22	21	1	4	1	2	3	
Switzerland	6	6	5	1				1	
*Dearborn-Ohio	20	16	18	—2	2			1	1
Total	153	130	129	1	10	4	12	6	4
5th District									
Parke-Vermillion	35	27	24	3	4	1	2	2	1
Putnam	21	18	19	—1	1	1	2	1	2
Vigo	123	110	104	6	5	5	6	2	6
Clay	16	14	17	—3		1	1	2	
Total	195	169	164	5	10	8	11	7	9
6th District									
Hancock	25	21	23	—2	2			3	
*Henry	39	36	37	—1		1	4		1
*Wayne-Union	77	65	65		5	1	7	2	3
*Rush	15	15	16	—1		1	1		
Fayette-Franklin	25	20	18	2	2	3	1		2
Shelby	38	25	25		6	3	5	3	
Total	219	182	184	—2	15	9	18	8	6
7th District									
*Hendricks	20	18	21	—3	1	1	2		1
Marion	1005	868	821	47	71	77	70	21	23
*Morgan	24	17	20	—3	3		2	1	1
*Johnson	23	19	16	3	2	1	3		1
Total	1072	922	878	44	77	79	77	22	26
8th District									
*Madison	97	82	81	1	7	3	6	2	3
*Delaware-Blackford	125	99	87	12	12	17	14	4	3
Jay	22	19	18	1	2		2		
Randolph	30	26	26		3	1	2		
Total	274	226	212	14	24	21	24	6	6
9th District									
*Benton	11	11	8	3		1			
*Fountain-Warren	20	17	21	—4	3		1	1	
*Tippecanoe	98	95	95			6	6	1	1
*Montgomery	36	31	30	1	2	2	6	1	
Clinton	32	28	25	3	2	2	3	2	
*Tipton	17	12	13	—1	2		3		
*Boone	27	21	18	3	3	1	2	1	
*Hamilton	25	22	22		1	1	2	1	1
White	7	3	3				2		2
Total	273	240	235	5	13	13	25	7	4
10th District									
Lake	313	276	263	13	21	31	26	4	3
*Porter	30	25	25		3	1	3	1	
*Jasper-Newton	25	21	19	2	2		5		
Total	368	322	307	15	26	32	34	5	3
11th District									
Carroll	13	10	14	—4	2		1	2	
Cass	47	34	38	—4	6		7		1
*Miami	25	20	18	2	4				1
*Wabash	29	24	24		3		4	1	
Huntington	26	24	25	—1			1		1
Howard	45	36	37	—1	3	6	4	1	1
*Grant	65	56	57	—1	2	1	7	1	1
Total	250	204	213	—9	20	7	24	5	5
12th District									
LaGrange	5	5	5						
Steuben	17	11	10	1	4	2	1	1	
*Noble	28	27	25	1	1	2	2		
DeKalb	26	23	22	1	2	2	2	1	
*Whitley	19	10	11	—1	2		4		4
*Allen	220	194	184	10	8	15	22	2	10
Wells	30	25	24	1	1	2	5	1	
*Adams	20	18	18			1	2	1	2
Total	365	312	299	13	18	24	38	6	16

Experience is the Best Teacher



It's true in medicine—

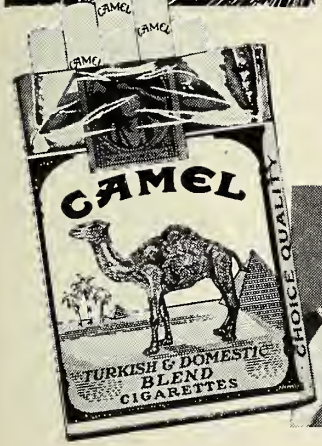
John William Ballantyne

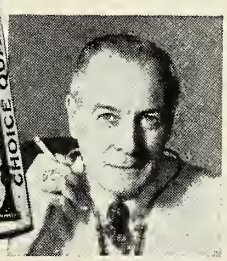
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proved it in obstetrics

BALLANTYNE, in his early studies of anatomical and pathological conditions found in the new-born, sensed the value of routine prenatal care in obstetrics. As a pioneer for prenatal care he was the first to establish a clinic for the expectant mother. World-wide acceptance of Ballantyne's concepts quickly followed his successful experiences in prenatal supervision.

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Let your own experience tell you why more people are smoking Camels than ever before.

According to a Nationwide survey:

More Doctors Smoke CAMELS than any other cigarette

When 113,597 doctors from coast to coast — in every field of medicine — were asked by three independent research organizations to name the cigarette they smoked, more doctors named Camel than any other brand!

County Society	No. M.D.'s in* County	Members Dec. 31, 1947	Members Dec. 31, 1946	Loss— Gain	Eligible Non-Members	New Members	Removed and Retired	Deceased	Ineligible
13th District									
*LaPorte	75	60	52	8	8	7	8	2	
St. Joseph	194	166	168	—2	13	3	18	4	3
Elkhart	92	78	76	2	3	6	12		1
*Starke	6	5	3	2	1				
Pulaski	8	8	6	2		2			
Fulton	15	14	13	1			1		
Marshall	30	22	27	—5	3	1	3	2	1
*Kosciusko	25	16	14	2	7	2	2		
Total	445	369	359	10	35	21	44	9	5
SUMMARY BY DISTRICTS									
1st District	300	243	240	3	27	15	28	10	5
2nd District	176	151	148	3	13	7	12	9	1
3rd District	162	145	141	4	5	10	16	9	2
4th District	153	130	129	1	10	4	12	6	4
5th District	195	169	164	5	10	8	11	7	9
6th District	219	182	184	—2	15	9	18	8	6
7th District	1072	922	878	44	77	79	77	22	26
8th District	274	226	212	14	24	21	24	6	6
9th District	273	240	235	5	13	13	25	7	4
10th District	368	322	307	15	26	32	34	5	3
11th District	250	204	213	—9	20	7	24	5	5
12th District	365	312	299	13	18	24	38	6	16
13th District	445	369	359	10	35	21	44	9	5
Total	4252	3615	3509	106	294	250	363	109	92

* Physicians are listed in the counties in which they hold membership; not in the counties in which they reside.

127 physicians received membership gratis in 1947 because of military service.

172 physicians were honorary members in 1947.

New Business

1. *Certification of honorary members.* On motion of Drs. Clark and Garber, the Council accepted for honorary membership in the state association the members listed by ten county medical society secretaries. This list carried names which through oversight or because of recent eligibility were not submitted to the House of Delegates at the October session.

2. *Indiana Inter-Professional Health Council.* On motion of Drs. Clark and Black, Drs. E. H. Clauser and A. P. Hauss were reappointed members of the Committee on Indiana Inter-Professional Health Council for 1948. Dr. Clauser is to serve as chairman of this committee.

3. *Report of Committee on Medical Education and Hospitals.* Dr. Herman M. Baker, chairman, presented the following report on the meeting of his committee, which was held at the Columbia Club, in Indianapolis, on Saturday evening, January 17, 1948:

"All of the membership of the committee was present, Drs. E. H. Clauser, O. O. Alexander, C. J. Clark, Harry Klepinger, Harry Ross, and the chairman. A guest of the committee was Dr. John VanNuys, dean of the medical school.

"Several hours were spent in discussing the various problems confronting the committee, particularly the two mandates from the House of Delegates, the first of which was a study of premedical education, and the second, the study of the possibilities of the employment of a full-time field secretary. After considerable discussion, Dr. Clark moved, and Dr. Ross seconded, that the committee give wholehearted support to the present administration of the medical school, that the president of the state medical association recommend to the Trustees of Indiana University the urgency of moving the first year of the medical course from Bloomington to Indianapolis, and also that the state medical association urge upon the Trustees of Indiana University the need for a larger budget for the medical school and the very pressing need for increase in faculty and facilities." (Here Dr. Baker asked if the Council wanted his committee to make these recommendations to the Board of Trustees of Indiana University, or if these recommendations should come from the Council. Drs. Clark and Combs moved that the committee's report in the first part he accepted and that the chairman of the Council, on behalf of the Indiana State Medical Association, be instructed to communicate this message to the Board of Trustees of Indiana University).

"The second matter that was disposed of by the committee was the question of the field secretary. The committee recommends the employment of a field secretary, full-time, who shall be a physician and who shall work in cooperation with Indiana University Medical School, under the direction of the dean and the department of Graduate Education, and the Committee on Medical Education and Hospitals of the Indiana State Medical Association, to promote graduate medical education in all of its phases in the state of Indiana outside of Indianapolis. The salary for this person is to be left to the jurisdiction of the Council.

"In addition to the above recommendations the Committee asks the Council for six hundred dollars to carry on its work the coming year. It also asks approval of the Council to recognize the graduate education program being put on in Vanderburgh county as a pilot program that might well be used in other centers in the state at a later time. It is suggested also that certificates might well be given general practitioners who register for and attend the course in Vanderburgh county and possibly other similar courses, which certificates would be recognized by the Board of General Practice as constituting approved graduate study. It is contemplated that the program, as now set up in Vanderburgh county, will give during 1948 sixty hours of work at the graduate level."

On motion of Dr. Clark, Dr. Baker's report was accepted.

Dr. Baker suggested that a field secretary could do a splendid job in promoting public relations in conjunction with the proposed educational program.

(Continued on Page 344)



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(Continued from Page 342

Dr. Nafe said the Council should decide what it wants to do in this whole matter and whether or not the public relations program can be tied in with the graduate education program. "We should appraise this whole picture before the Council makes a definite decision on the person to be employed, whether he should be a physician, et cetera."

4. *Public relations.* Dr. J. Neill Garber, chairman of the Committee on Public Relations, reported on the regional public relations meeting which he attended in Cleveland on January 5 and outlined briefly the programs of some of the other states, notably California, Colorado, Illinois, Ohio, Oklahoma, Michigan and Pennsylvania. Ohio, Michigan and Pennsylvania have full-time public relations counsel, as does also the American Medical Association. Not knowing how much of a public relations program that the Council wants to inaugurate at this time, Dr. Garber said it was impossible for him to set a budget figure for his committee.

5. *Centennial celebration.* Dr. Charles N. Combs, chairman of the Committee on Centennial Celebration and History, reported on the plans of his committee for celebration of the association's centennial in 1949. Present plans include publication of a memorial book covering the history of medicine in Indiana for one hundred years, special exhibits during the one hundredth annual session, and a speaker of note for the 1949 annual banquet.

Dr. Hauss discussed this subject, saying, "I feel that this is the opportune time for the Indiana State Medical Association to sell the medical profession into every hamlet, town and neighborhood in the state of Indiana.

"I believe we should plan a gigantic state-wide Centennial Celebration, portraying the history and merits of medical service and scientific medical development in Indiana, including public meetings, church and school programs, special radio broadcasts, window displays, sponsored newspaper pages, and tributes to the Doctor, proclamations of Indiana's Medical Centennial, by the Governor of the State and the Mayors of every incorporated town or city in Indiana. The celebration should not be confined to Indianapolis, but should have organized committees in every county made up of representatives of the various service clubs, civic, fraternal, and church organizations, cooperating with each County Medical Society. This program will require some money and a lot of hard work, but much of the publicity expense would be enthusiastically sponsored and underwritten by local lay and professional groups, merchants, and industrialists, pharmaceutical houses, retail druggists, etc.

"All this and more can be done ethically, with dignity and honor to the medical profession. It is your one big opportunity to take your 'light from under the bushel' and enlighten the State of Indiana on the merits of the private practice of medicine in the American way.

"Dr. Combs and his Committee on Centennial Celebration and History, have laid a wonderful foundation for our Centennial and I would recommend that the Council take no definite action on the Centennial program until they receive official recommendations from Dr. Comb's committee."

Dr. Combs said his committee would have an official report for the House of Delegates in October.

5. *Hospital Standards Committee.* Dr. Dodds, chairman, had no report to make at this time.

6. *Contract with editor of* THE JOURNAL signed by Dr. Mitchell, acting chairman of the Council.

7. *Election of associate editor of* THE JOURNAL. The resignation of Dr. N. K. Forster, associate editor of THE JOURNAL, was accepted on motion of Drs. Black and Garber. Upon the motion of Drs. Clark and Dodds, Dr. Frank B. Ramsey of Indianapolis was elected associate editor to succeed Dr. Forster.

8. *Election of alternate delegate to A.M.A.* On motion of Drs. Clark and Kennedy, Dr. William H. Howard of Hammond was elected alternate delegate to the A.M.A. for the term expiring December 31, 1948, to succeed Dr. Forster, resigned.

9. *Nominations for Editorial Board.* Dr. Black nominated Dr. A. W. Cavins, Terre Haute.

Additional nominations are to be made at the next Council meeting.

10. *April meeting of Council.* It was taken by consent that the next meeting of the Council should be held on Sunday, April 4, 1948.

Elections for 1948

1. *Executive Committee members.* On motion of Drs. Clark and Black, Dr. C. H. McCaskey and Dr. Walter L. Portteus were re-elected for 1948.

2. *Chairman of Council.* On motion of Drs. Howard and Clark, Dr. Alfred Ellison was re-elected chairman of the Council for 1948.

There being no further business, the meeting was adjourned.

EXECUTIVE COMMITTEE

January 17, 1948

Roll call showed the following present: C. H. McCaskey, M.D., chairman; Walter L. Portteus, M.D.; Cleon A. Nafe, M.D.; A. P. Hauss, M.D.; A. F. Weyerbacher, M.D.; Albert Stump, attorney, and Ray E. Smith, executive secretary.

Guests: A. M. Mitchell, M.D., chairman, Committee on Secretaries' Conference, and George M. Brother, M.D., Assistant State Health Commissioner.

Statements of receipts and expenditures for December for the association committees and THE JOURNAL were approved.

1947 Annual Session, French Lick, October 28, 29, 30, 1947

The report of the Committee on Convention Arrangements showed a balance of $311.41 of the $3,000.00 appropriated to the committee to cover entertainment expenses. A motion was made by

Why do Sally, Irene and Mary need vitamin D ?

Growing children require vitamin D mainly to prevent rickets. They also need vitamin D, though to a lesser degree, to insure optimal development of muscles and other soft tissues containing considerable amounts of phosphorus . . . Milk is the logical menstruum for administering vitamin D to growing children, as well as to infants, pregnant women and lactating mothers. This suggests the use of Drisdol in Propylene Glycol, which diffuses uniformly in milk, fruit juices and other fluids.

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Dr. Portteus and seconded by Dr. Nafe commending Dr. Hauss and Dr. Boyd on the excellent job they did on the 1947 annual session.

1948 Annual Session, Indianapolis, October 26, 27 and 28, 1948

Scientific exhibit. On motion of Drs. Portteus and Hauss, the committee voted to award medals bearing the likeness of Dr. Frank B. Wynn, the father of scientific exhibits, to the exhibitors having the three best scientific exhibits in 1948. These medals, in gold, silver and bronze, are to be presented with certificates. The president of the association is to appoint the committee to select the winners.

Legislative Matters

National

Representative Forest A. Harness will speak on alleged lobbying activities of proponents of the Wagner-Murray-Dingell bill at the Secretaries' Conference on February 15.

Comment in the bulletin of the Hoosier State Press Association, setting out bad features of the compulsory health insurance bill, was read.

Organization Matters

Indiana Heart Foundation. Letter received from the co-chairmen of the Indiana Heart Foundation, Inc., calling attention to the organization of this foundation and to a meeting to be held on January 18, 1948, in the Columbia Club, Indianapolis, was read.

Payment of expenses of delegates to the A.M.A. The policies of nine state medical societies regarding payment of A.M.A. delegates' expenses was read, and the secretary was directed to collect similar data from other states for the information of the House of Delegates.

On motion of Drs. Nafe and Portteus, the executive secretary was instructed to notify the agent for the Commercial Casualty Insurance Company to discontinue using the name of "Indiana State Medical Society" on the premium notices of this company.

Health and accident insurance for membership. On motion of Drs. Portteus and Nafe, the secretary was directed to communicate with other state medical associations and learn what action they have taken on approving health and accident insurance for their membership.

Removal of JOURNAL *office.* The secretary reported that the Indianapolis Medical Society was considering the proposition of trading office space with THE JOURNAL office.

In connection with the redecoration of the headquarters office, the secretary was instructed to find out from the Hume Mansur Company whether or not the wall in the southeast corner office can be removed.

Cancer Educational Program

Dr. George M. Brother, assistant state health commissioner, explained the Indiana Cancer Bulletin which will be distributed to every member of the Indiana State Medical Association. The bulletin will contain twenty-five releases originally published by the Illinois State Medical Society, bound so that additional releases may be added. The bulletins will be distributed under the sponsorship of the Indiana State Medical Association, Indiana State Board of Health, Indiana Cancer Society, and the Indiana University School of Medicine. On motion of Drs. Nafe and Portteus this project was approved and the State Board of Health was commended for its work in this connection.

Request of Woman's Auxiliary to the Indiana State Medical Association for Funds

On motion of Drs. Hauss and Portteus a request for $800.00 by the Woman's Auxiliary, to be used for publishing "The Hoosier Doctor's Wife," state meeting expenses, and for legislative activities, was approved.

Report of Committee on Medical Education and Hospitals

Dr. Herman Baker, chairman of the Committee on Medical Education and Hospitals, reported that his committee had held a meeting and would have some recommendations to present to the Council at its meeting on January 18. He explained that a postgraduate course, sponsored by the Vanderburgh County Medical Society, beginning February 26, will serve as a model for postgraduate courses which the committee proposes to sponsor in other parts of the state.

Report on Mutual Medical Insurance, Inc.

Dr. Weyerbacher, treasurer of Mutual Medical Insurance, Inc., called attention to the provisions of the By-Laws of the company which require that the Indiana State Medical Association suggest names for membership of the Board of Directors of this company. The matter was referred to the Council.

The Journal

Professional cards.

a. The secretary reported that physicians had been notified of reduction in size of the cards, effective in the March issue.

b. The secretary read a letter which had been sent to county medial societies asking that they approve professional cards of members who designate themselves as specialists.

c. Letter was read from the Indianapolis Medical Society stating that its Committee on Ethics is considering the professional cards which the members of the society are running in THE JOURNAL.

There being no further business, the meeting was adjourned.

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COMMITTEE ON PUBLICITY

January 2, 1948.

Present: H. G. Hamer, M.D., chairman; James O. Ritchey, M.D.; Marlow W. Manion, M.D.; Cleon A. Nafe, M.D., president; Thomas A. Hendricks, secretary emeritus, and Ray E. Smith, executive secretary.

In discussing a letter criticising physicians, which appeared in "The People Speak" column of The Indianapolis Star, January 1, 1948, Mr. Hendricks recalled that the committee had reported its disapproval of unethical practices, such as fee splitting and rebates, to the House of Delegates eight or ten years ago and the House of Delegates had concurred. The secretary was instructed to present information on this action to the committee at its next meeting.

The following "Hints on Health" columns were approved:

Week of January 19, 1948—"Frostbite."

Week of January 26, 1948—"The Prostate Gland."

Report was made by the secretary that Dr. Ben B. Moore and Dr. David L. Smith, former members of the committee, had approved script of a playlet, "Barbiturate Poisoning," which was presented over WFBM by the Radio Committee of the Woman's Auxiliary on Saturday afternoon, December 27, 1947. A news release about the broadcast was reviewed.

The secretary called attention to a new series of A.M.A. transcriptions beginning over WFBM Saturday, January 3, 1948, entitled, "Before the Doctor Comes," at a new time, 4:15 p.m.

The secretary submitted a news release entitled, "Doctors Suggest Health Check-up as 1948 Resolve," which was approved by Drs. Moore and Smith and mailed to more than five hundred Indiana newspapers on December 24, 1947.

A special news release on Dr. Cleon A. Nafe assuming the presidency of the state medical association, together with the 1948 committees, which was sent to Indianapolis newspapers for release December 31, 1947, was noted.

Invitation from the Woman's Auxiliary to the Indianapolis Medical Society for the executive secretary to speak on "The Doctor and the Legislature" at its annual legislative program on January 15, 1948, was approved.

The secretary reported steps taken to date to assemble an exhibit for the committee on progress made by medicine for the association's centennial celebration next year.

January 16, 1948.

Present: James O. Ritchey, M.D.; Marlow W. Manion, M.D.; Cleon A. Nafe, M.D., president, and Ray E. Smith, executive secretary. Illness prevented the chairman, H. G. Hamer, M.D., from being present.

The following "Hints on Health" columns were approved:

Week of February 2, 1948—"Pains in the Legs."

Week of February 9, 1948—"Chronic Hives."

Week of February 16, 1948—"Trichinosis."

Week of February 23, 1948—"Female Adolescence."

The following news releases about the Secretaries' Conference for daily and weekly papers were approved:

"Harness to Expose Federal Lobbyists at Doctor Meeting."

"A.M.A. Board Head to Address Physicians at February 15 Parley."

Speakers' provided:

January 11, 1948—Hendricks County Medical Society, Danville.

After learning of the cost of building an exhibit for the laity stressing achievements of medicine for the past hundred years, for display in connection with the centennial observation in 1949, it was decided to refer such a project to the Committee on Centennial Celebration and History.

The secretary was instructed to acknowledge receipt of folders entitled, "Doctors Today," received from the Bureau of Health Education of the American Medical Association, which give information about the A.M.A. radio program by the same name.

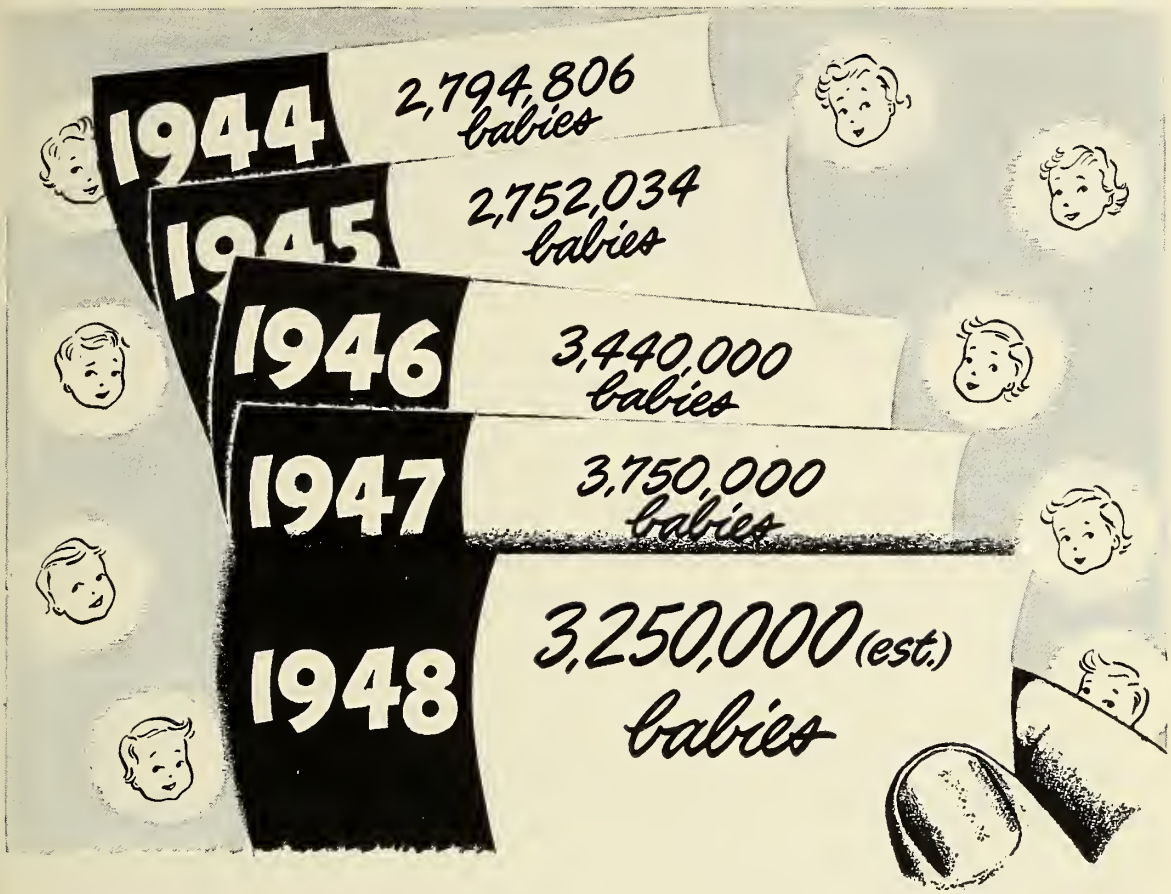
A news release in regard to request of the trustees of the A.M.A. for the profession to rid itself of physicians who accept rebates, kickbacks and commissions, was noted.

The secretary reported that Dr. Hamer is preparing a chapter on the Committee on Publicity for the forthcoming history of the Indiana State Medical Association.

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Secretary-Treasurer, C. Jules Heritier, Columbia City.

Adams County Medical Society members met at the Adams County Memorial Hospital on January thirteenth. The nine members present heard a discussion of "Advancement in Treatment of Eye Diseases" by Drs. R. W. Terrill and T. O. Meyer, both of Fort Wayne.

* * *

Benton County Medical Society members held a meeting on January nineteenth at the Benton County Country Club, in Fowler. They discussed the county welfare department and the program for the coming year at this meeting. Five members were present.

* * *

Boone County Medical Society members met on January sixth at the Witham Hospital in Lebanon for a dinner meeting. James D. Peirce, M.D., of the Department of Hematology, Eli Lilly & Company, discussed "Anemias." Eighteen members attended the meeting.

* * *

Clay County Medical Society members held a meeting at the Clay County Hospital, in Brazil, for a discussion of general business on January thirteenth. Seven members attended the meeting.

The members held a meeting at Clay County Hospital, in Brazil, on February tenth, at which seven members were present.

* * *

Clinton County Medical Society members met at the home of Dr. and Mrs. R. A. Hedgcock, at Frankfort, where they were dinner guests at a meeting on February third. Nineteen members were present.

* * *

Dearborn-Ohio County Medical Society members met at the New Reagan Hotel, Lawrenceburg, on January eighth. The speaker at this meeting was Dr. C. N. Manley, of Rising Sun, whose subject was "Allergy." Twelve members attended the meeting.

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Elkhart County Medical Society members met at the Hotel Elkhart, in Elkhart, on February fifth. The sixty members who were present heard Dr. James A. Work, Jr., of Elkhart, discuss "Chronic Cystic Mastitis in the Female."

* * *

Fayette-Franklin County Medical Society members held a meeting on January thirteenth for a discussion of the formation of a staff in the local hospital. Nine members attended the meeting.

The members held a meeting in Connersville on February sixth. The speaker was Mr. Albert Stump, of Indianapolis, who spoke on "Organization of a Staff in a Local Hospital." Seventeen members were present.

* * *

Fort Wayne (Allen) County Medical Society members met at the Chamber of Commerce, in Fort Wayne, for a dinner meeting on January sixth. Guest speaker was Dr. Philip Thorek, of Chicago, who spoke on "Intestinal Obstruction." Seventy-four members were present.

At a meeting at the Lutheran Hospital on January twentieth the fifty-two members in attendance were presented a hospital program, with presentation and discussion of orthopedic cases.

At another meeting at the Chamber of Commerce on February third Paul O. Hagemann, M.D., presented a paper on "Arthritis." Sixty members attended this meeting.

* * *

Grant County Medical Society members held a meeting on January twenty-second at the Marion General Hospital. The guest speaker for this meeting was Dr. Raymond Sorenson, of Kokomo, whose subject was "Urological Problems as seen in General Practice." Thirty-one members were present.

* * *

Greene County Medical Society members met at the Freeman Greene County Hospital in Linton on January fifteenth. This was a general business meeting. Sixteen members were present.

* * *

Hamilton County Medical Society members met at the Firestone Cafeteria in Noblesville on January thirteenth. Dr. Joseph E. Walther, of Indianapolis, discussed "Chronic Ulcerative Diseases of the Colon." Thirteen members attended the meeting.

* * *

Hendricks County Medical Society members held the first meeting of the year on January eleventh at the O K Restaurant, in Danville. Mr. Ray E. Smith, executive secretary of the state association, spoke on "Medical Public Relations," plus a report of the Interim Session of the American Medical Association conference at Cleveland. The doctors had their wives as guests at this luncheon meeting.

Howard County Medical Society members met on January second in Kokomo. The guest speaker was Dr. John Van Nuys, Dean of Indiana University School of Medicine, whose subject was "Medical Education in Indiana." Twenty-eight members attended the meeting.

* * *

Huntington County Medical Society members held a meeting at the Hotel LaFontaine in Huntington on January sixth. Mr. Luke Sheer discussed "Early Indian and Pioneer History of Huntington Area." Thirty-one members and guests, including physicians' wives who attended this meeting, were present.

At another meeting on February third a film on "Anomalies and Stricture of Bile Ducts" was shown to thirteen members.

* * *

LaPorte County Medical Society members held a meeting on January fifteenth at the Sheridan Beach Hotel, in Michigan City. Dr. Philip Thorek, of Chicago, spoke on "The Diagnosis and Treatment of Intestinal Obstruction." Thirty-five members were present.

* * *

Lawrence County Medical Society members met at the Dunn Memorial Hospital at Bedford on January seventh. Thirteen members attended the meeting.

* * *

Madison County Medical Society members held a meeting at the Idlewold Golf and Country Club at Pendleton on January nineteenth. The guest speaker was Dr. Fred A. Thomas, of Indianapolis, whose topic was "Present Day Use of Anesthetics." Thirty-two members were present.

* * *

Marshall County Medical Society members met at Plymouth on February fourth to hear Kenneth L. Olson, M.D., speak on "Activities of National Physicians Committee." Thirteen members attended the meeting.

* * *

Montgomery County Medical Society members met at the Culver Hospital in Crawfordsville on January fifteenth. The twenty-six members present heard Dr. Carl P. Huber, of Indianapolis, discuss "Management of Prolonged Labor."

* * *

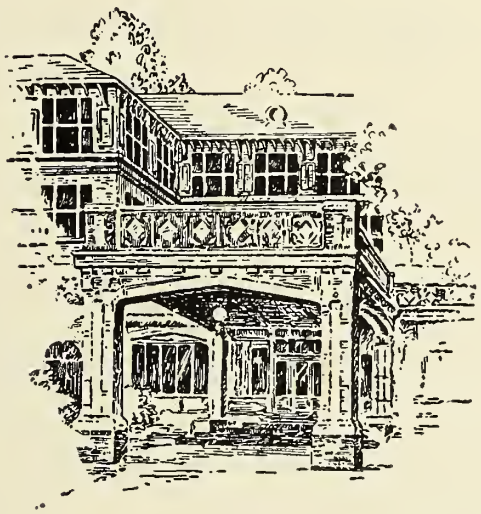
Parke-Vermillion County Medical Society members meet at the Vermillion County Hospital on January twenty-first. Ten members attended the meeting.

* * *

Randolph County Medical Society members held a meeting on January eleventh at the Randolph County Memorial Hospital. The fourteen members present heard Dr. Byron Nixon make the president's address to the society.

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St. Joseph County Medical Society members held a meeting on February tenth. Speakers were Dr. George Plain and Dr. George Gates, both of South Bend, who spoke on "Phlebothrombosis." Sixty-seven members and eight guests were in attendance.

* * *

Vanderburgh County Medical Society members met at the Hotel McCurdy in Evansville for a dinner meeting on January thirteenth. Guest speaker at this meeting was Dr. J. A. McNearney, of St. Louis, whose subject was "Care the Anesthesiologist Gives the Patient." The members had as their guests several physicians from neighboring societies in the Tri-State area, with a total attendance of 127.

WOMAN'S AUXILIARY to the Indiana State Medical Association

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OUR GOAL

"Every Physician's Wife An Auxiliary Member"

Following are the proposed amendments to the By-Laws of the Woman's Auxiliary to the Indiana State Medical Association. These amendments will be voted upon at the House of Delegates meeting to be held at Evansville, Indiana, April 27 and 28.

Amendments Proposed April, 1947

Amend Article III. Members. Section I by striking out Section I and adding the following Section I:

Section I. Membership in this Auxiliary shall be composed of:

1. Active members. Active members are the members of the component auxiliaries.

2. Members-at-large. Membership-at-large may be conferred upon the wives of members of the A.M.A. who live in counties where there are no component auxiliaries. Members-at-large have all the privileges of active members. Application may be made to the president or the treasurer, for membership. Annual dues of one dollar are payable to the state treasurer prior to March first.

3. Associate members. Associate membership may be conferred upon the mothers of members of the American Medical Association in counties where there are no component auxiliaries. Associate members do not hold office or vote. Annual dues of one dollar are payable to the state treasurer prior to March first.

4. Honorary members. Honorary membership may be conferred upon a member upon the recommendation of the Board of Directors and with the approval of the House of Delegates. The title of Honorary Member shall entitle the holder to all the privileges of an active member. An honorary member shall pay no dues.

Amend Article VIII. Standing Committees by striking out the words "Executive Committee."

Amend by inserting a new Article X. Policy as follows:

Article X. Policy.

Section 1. The policies and objects of this Auxiliary shall be consistent with those of the Woman's Auxiliary to the American Medical Association.

Section 2. This Auxiliary shall not affiliate with other federated organizations nor provide on its board of directors for representatives of other organizations, nor be itself officially represented on the boards of other organizations.

Section 3. The Woman's Auxiliary shall not endorse a candidate for public office. Neither the name of the Auxiliary nor the name of an officer shall be used in connection with a commercial concern, unless it is so recommended by the Advisory Council of the Board of Trustees of the Indiana State Medical Association.

Present Article X. Parliamentary Authority to become Article XI.

Present Article XI. Amendment to the By-Laws to become Article XII.

First reading of proposed amendments at House of Delegates meeting Indianapolis, April, 1947.

Amendments Proposed October, 1947

Amend Article III. Members, Section 3 by striking out the words "seventy-five (75)," following the words "rate of" and inserting the words "one dollar ($1.00)."

As amended Section 3 will read: Each county Auxiliary shall pay annual dues to the State Auxiliary at the rate of one dollar per capita, this sum to include the dues of twenty-five cents (25c) per capita to be paid the Woman's Auxiliary to American Medical Association.

Amend Article IV. Officers, Section 3 by striking out the word "immediately" following the words "elected by the Board of Directors."

Amend Article VIII. Standing Committees, Section 1 by striking out the word "Press" of the Press and Publicity Committee.

Amend Section 1 by inserting "An Editorial Committee, a Public Relations Committee, a Radio Committee" following the words "a Program Committee."

Amendments proposed at the House of Delegates meeting in Indianapolis April, 1947 and at the French Lick business meeting in October 1947.

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Books

BOOKS REVIEWED

TEXT BOOK OF GENERAL SURGERY, By Warren H. Cole, M.D., F.A.C.S., Professor and Head of the Department of Surgery, University of Illinois College of Medicine; Director of Surgical Service, Illinois Research and Educational Hospitals, Chicago, and Robert Elman, M.D., Associate Professor of Clinical Surgery, Washington University School of Medicine; Assistant Surgeon, Barnes Hospital; Associate Surgeon St. Louis Children's Hospital; Director of Surgical Service, H. G. Phillips Hospital, St. Louis. Fourth edition. 1069 pages. Well illustrated. Cloth. Price $10.00. D. Appleton-Century Co. Inc., Publishers. 1944.

This is the fourth edition of the Cole-Elman text book on general surgery, which was originally published in 1936. In the preface of the third edition it is stated that the new edition is written in an attempt to keep up with the progress in surgical procedure from the year 1936 to the time of the publication of the third edition.

The revised fourth edition contains a chapter on "War and Catastrophe Surgery." The addition of this chapter is due, no doubt, to the many surgical conditions arising out of the casualties of World War II. The book emphasizes the sound fundamentals of surgical teachings. It is authoritatively written and well illustrated.

Reviewed by F. R. Nicholas Carter. M.D.

* * *

THE MANAGEMENT OF OBSTETRIC DIFFICULTIES. By Paul Titus, M.D., Obstetrican and Gynecologist to the St. Margaret Memorial Hospital, Pittsburgh; Secretary of the American Board of Obstetrics and Gynecology; Commander (MC) USNR, attached to Professional Division, Bureau of Medicine and Surgery, Navy Department, Washington, D.C. 1000 pages with 426 illustrations and 8 color plates. Cloth. Price $10.00. The C. V. Mosby Company, St. Louis, Publishers. 1945.

This is the third edition of this book. An effort is made to keep abreast of the changes in the treatment of sterility, antepartum care, and the general management of pregnancy, labor, and the puerperium, with their complications.

A discussion of x-ray pelvimetry is included in the text. Caudal anesthesia is a new division of the general subject of obstetricial anesthesia. The technics of extraperitoneal cesarean section are discussed, with detailed illustrations.

Rh incompatibilities and erythroblastosis are explained in detail.

This book constitutes an excellent text book dealing with the practical aspects of major and minor obstetric emergencies.

Reviewed by F. R. Nicholas Carter, M.D.

* * *

Diseases of the Chest: With Emphasis on X-ray Diagnosis. By Eli H. Rugin, M.D., visiting physician in Tuberculosis and Physician-in-charge, Chest Clinic, Morrisania City Hospital, New York. 685 pages, with 355 illustrations (24 plates in color). Cloth. Price $12.00. W. B. Saunders Company, Philadelphia, 1947.

A physician specializing in diseases of the chest should be able to interpret roentgenograms of the chest without relying on the opinion of a roentgenologist and this book is designed to teach such an accomplishment. Interspersed throughout the text are numerous x-ray pictures with an apt case history here and there to personalize the description. The large colored plates of pathology involved add to the cost of the book but are well worth it. The chapter on the treatment of pulmonary tuberculosis exposes the fallacies of the many fads that have hindered progress in this field and the author outlines a practical method of treatment which can be applied by any general practitioner with good results.

The subject treated is an old one but retold in a fresh and captivating style while including the latest ultra-scientific additions to our knowledge. One chapter concerns affections of the mediastinum, pleura and diaphragm, while the last one discusses the surgical modalities applicable to chest diseases.

Charles N. Combs.

* * *

DIAGNOSIS IN DAILY PRACTICE. (An office routine based on the incidence of various diseases). By Benjamin V. White, M.D., Assistant Clinical Professor of Medicine, Yale University School of Medicine; Consultant in Gastroenterology, Veterans' Administration Hospital, Newington, Connecticut, and Charles F. Geschickter, M.D., Professor of Pathology, Georgetown University Medical School, Consultant in Pathology, U.S. Naval Medical School, Bethesda, Maryland. 693 pages with 360 illustrations. Cloth. Price $15.00. J. B. Lippincott Company, Philadelphia, 1947.

This book is not a text but an analytical concordance. Its exact classification of symptoms is often arbitrary and even forced, but it compels the attention to diagnostic leads that might otherwise be missed. The tables showing the expected occurrence of different diseases with seasonal and geographic variations are very helpful. There is a list of rare diseases that must be memorized by every clinician, lest they be overlooked by reason of their infrequency. There is also a list of emergency conditions requiring immediate diagnosis and treatment to prevent disastrous sequellae as compared to those admitting of leisure in diagnosis. With this clue finder, diagnosing one of the two thousand disease entities is as fascinating as solving a murder mystery story. The volume is beautifully and fully illustrated and makes an ideal desk aid. It also gives plans for an office.

Charles N. Combs.

* * *

INTERNAL MEDICINE IN GENERAL PRACTICE (Second Edition). By Robert P. McCombs, M.D., Assistant Professor of Medicine and Director of Postgraduate Teaching, Tufts College Medical School; Senior Attending Physician, the Joseph H. Pratt Diagnostic Hospital; Diplomate of the American Board of Internal Medicine. 741 pages, with 122 illustrations. Price $8.00. Cloth. W. B. Saunders Company, Philadelphia, 1947.

In the second edition of this book the author has closely followed the general plan of his first book although the subject matter has been completely revised and rearranged.

The basic principles of every day problems in internal medicine are factually reviewed while that which may be considered as controversial or which lies soley within the province of the specialist has been greatly condensed or omitted entirely. Special attention should be called to the addition of much new material which is pertinent to the ever changing trends in diagnosis and chemotherapy in the practice of medicine today.

A broad field is covered in this relatively small volume which also contains many illustrations, graphs, and color plates which add much to the usefulness of the book. It can well be considered a valuable addition to any medical library.

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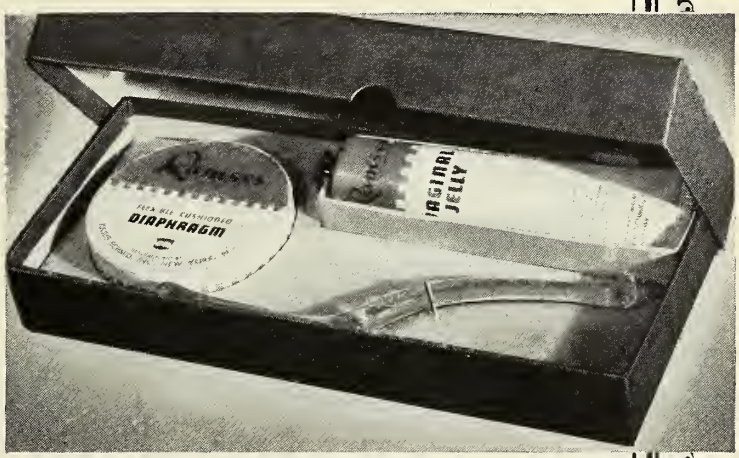
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SURGICAL ASPECTS OF CARCINOMA OF THE THYROID GLAND*

FRANK B. RAMSEY, M.D.

INDIANAPOLIS

CARCINOMA of the thyroid gland is not a common type of malignancy as compared with neoplasms of the stomach, uterus and large bowel. However, it does have a fairly constant rate of occurrence, and it is such a distressing condition when in the advanced stage that everyone should be familiar with its possibility and with the means of preventing it.

Thyroid cancer is unique in that it almost always arises in a lesion which is benign for a long time, which is easily diagnosable, and which may be removed with a low morbidity rate and a low mortality rate. There are two lesions which give rise to thyroid malignancy in the great majority of cases, the fetal or embryonal adenoma and the lateral aberrant thyroid bodies. Both of these tumors are either benign or of very low grade malignancy for a significant period of time prior to development of anaplastic changes.

INCIDENCE

The University of Pennsylvania series of 1,135 nodular goiters, as reported by Horn et al.,[1] showed an incidence of malignancy of 5.5 per cent. Cole[2] reported a smaller series of 523 nodular goiters in which 7.2 per cent were demonstrated to be cancerous. Brenizer and McKnight[3] collected a larger series, 2,324 nodular goiters with 4.0 per cent malignancy.

If goiters with single or solitary adenomas alone are considered, the incidence of malignancy is reported as high as 15.0 per cent. This is because a single adenoma is usually of the fetal variety, whereas goiters with multiple nodules are apt to be composed of multiple colloid adenomas and may not contain any of the fetal or embryonal nodules. It is the fetal adenoma which is so apt to develop into frank malignancy.

FETAL OR EMBRYONAL ADENOMAS

Fetal adenomas are so called since they are composed of a solid mass of cells and resemble, for this reason, fetal thyroid tissue. The adenomas are usually spherical and are enclosed by a tough, fairly thick, connective tissue capsule. They vary considerably in size from 0.5 to 5.5 cm. in diameter and may be located anywhere in the thyroid gland. The criteria for determination of malignancy in these tumors were not well defined prior to 1924. In those days it was not infrequently observed that nodules, which by ordinary standards were benign, had clinically demonstrated their ability to metastasize. Allen Graham[4] published his observations in 1924 and pointed out that microscopic study of the so-called benign metastasizers revealed that

* Presented before the Section on Surgery at the annual session of the Indiana State Medical Association, at French Lick, on October 29, 1947.

[1] Horn, R. C., Jr., Welty, R. F., Brooks, F. P., Rhoads, J. E., and Pendergrass, E. P.: Carcinoma of the Thyroid. Annals of Surg., 126, 140-155, 1947.

[2] Cole, W. H., Slaughter, D. P., and Rossiter, L. J.: Potential Dangers of Nontoxic Nodular Goiters. J.A.M.A., 127, 883-888, April, 1945.

[3] Brenizer, H. G., and McKnight, R. B.: True Adenomas of Thyroid Gland and Their Relation to Cancer. Tr. Am. A. Study Goiter, pp. 176-190, 1940.

[4] Graham, A.: Malignant Epithelial Tumors of the Thyroid. Surg. Gyn. and Obst., 39, 781-790, 1924.

their cells were invading the small blood vessels of the tumor.

Blood vessel invasion has therefore become the principal microscopic feature of malignant fetal adenomas. This method of metastasis may also be demonstrated grossly in the advanced case by observing the growth of the tumor through the middle thyroid vein and into the internal jugular vein.

LATERAL ABERRANT THYROID

Lateral aberrant thyroid bodies are encountered in the ratio of about 1 to 500 ordinary surgical goiters. They are located along the course of the great vessels of the neck and are thought to originate from the ultimo-branchial body which normally gives rise to a portion of the thyroid gland. They are of interest chiefly because of the fact that if allowed to remain in place they almost universally become malignant.

DIAGNOSIS

It is important to remember that malignant changes may take place in fetal adenomas and in lateral aberrant thyroid tissue regardless of the age of the patient. Carcinoma of the thyroid knows no age limitations, and may develop from adenomas in children, as well as in adults up to the ages of 70 and 80. The size of the adenoma is also of no significance, since nodules which were the size of a cherry have been known to become anaplastic.

Adenomas of the thyroid itself may be located and identified by proper methods of palpation. The lateral aberrant thyroid nodules cannot be differentiated accurately from other tumors or cysts which are located or which are present along the course of the carotid artery. The fact that they occur in this area makes the removal of all nodules along the great vessels highly advisable.

Detection by clinical examination of early malignant changes in thyroid tissue is difficult. Increase in size and a change to a firmer consistency is suggestive. However, these two signs may be produced by the occurrence of hemorrhage into an adenoma. The presence of a hard, infiltrating mass, the development of engorged veins, and the advent of hoarseness and stridor are all signs of advanced malignancy. A gland which is the site of a woody thyroiditis often may be confusing because of its firm texture. The fact that thyroiditis usually affects the entire gland uniformly, and carcinoma usually originates in one spot and then spreads, is helpful in distinguishing the two.

SURGICAL TREATMENT

The prophylactic removal of all solitary adenomas of the thyroid gland is recommended as a means of eliminating a definitely precancerous lesion. The removal of clinically benign lesions

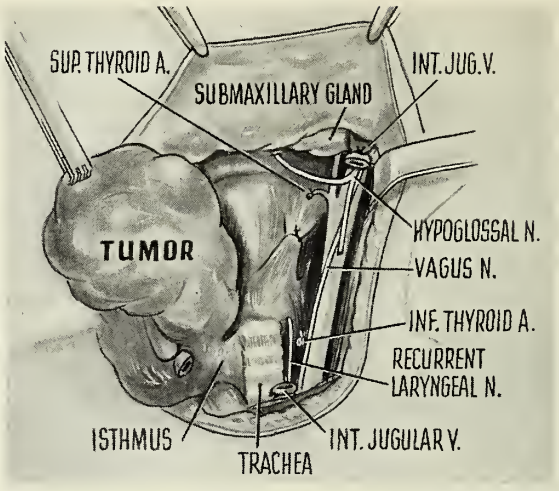


Figure 1—Illustrates the final stages of the radical operation. The superior and inferior thyroid arteries have been ligated and divided outside the gland. The recurrent laryngeal nerve has been located and preserved during separation of the lobe. The brachial plexus, vagus nerve, hypoglossal nerve, and phrenic nerve have been identified and preserved.

which, except for the threat of malignancy, are otherwise not troublesome, is well established in other organs, but is not universally recognized in the case of the thyroid. Surgical procedures for removal or repair of a precancerous cervix and for removal of breast nodules are now well accepted. The excision of thyroid nodules, which show at least the same propensity for malignant change as do breast tumors, is a reasonable precaution. Hinton and Lord[5] reviewed a large series of clinically benign nodular goiters and found that 7.6 per cent of them contained carcinoma. The same authors found 6.7 per cent malignancies in a large series of clinically benign breast lesions.

During the excision of fetal adenomas careful watch should be made for evidences of malignancy. Due to the fact that these nodules are surrounded by a tough capsule, premalignant or even low-grade malignant changes within the capsule do not require radical surgery if the capsule is unruptured during removal. If, however, the gross findings or the pathological report show more than grade I malignancy within an intact capsule, or indicate extension of the tumor beyond the capsule, radical removal of the involved thyroid lobe, together with removal on the same side of the prethyroid muscles, the lower half of the sternomastoid muscle, and the removal of all the thyroid veins and the internal jugular vein and accompanying lymph nodes is definitely indicated.

Lateral aberrant thyroid tissue should be removed and, if the frozen section study indicates the presence of carcinoma, the same radical type

[5] Hinton, J. W., and Lord, J. W., Jr.: Is Surgery Indicated in All Cases of Nodular Goiter, Toxic and Nontoxic? J.A.M.A., 129, 605-606, October, 1945.

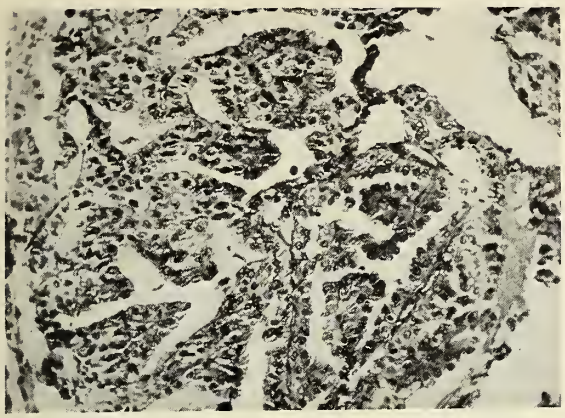


Figure 2—Photomicrograph of a typical portion of the tumor, showing the papillary type of architecture. The individual cells are anaplastic, but do not contain mitotic figures.



Figure 3—This portion of the tumor contains anaplastic epithelial cells with considerable round cell infiltration. A few of the acini are filled with an atypical type of colloid.

of operation with complete removal of the thyroid lobe of the same side should be carried out.

CASE REPORT

The following case illustrates the above principles: The patient is a 22-year-old colored girl who first noticed a nodule in the left side of the neck at the age of 8. It enlarged sufficiently to induce her to have it removed at the age of 21. Pathological diagnosis was grade I papillary carcinoma in lateral aberrant thyroid tissue, and x-ray therapy was advised. A few treatments were given but the patient did not return for the entire series. One year after the first operation she was seen in the Tumor Clinic of the Indianapolis General Hospital. At that time she had a recurrence of the tumor with a chain of similar, though smaller nodules along the sternomastoid muscle. A radical resection was carried out, as illustrated in Figure 1, including complete removal of the left lobe of the thyroid and its isthmus, together with the ribbon muscles, the lower half of the sternomastoid muscle, and the internal jugular vein and attached nodules. She convalesced uneventfully and is now receiving deep x-ray therapy. Pathological study of the thyroid lobe and the lateral aberrant nodules revealed a grade I papillary adenocarcinoma. (Figures 2 and 3.)

Postoperative x-ray therapy is recommended in all cases where the extent of the malignant process has necessitated a radical removal. Fortunately a majority of thyroid carcinomas are of low grade malignancy and many of them are radiosensitive. In the less anaplastic tumors five-year cure rates as high as 80 per cent have been reported.[6]

Where the extent of the neoplastic growth contraindicates even the radical removal, x-ray therapy is also used. In this connection, it is often advisable to perform a tracheotomy prior to radiation, to prevent encroachment on the airway by reactive edema in the tumor.

The coexistence of malignant or premalignant fetal adenomas with hyperthyroidism is of rare occurrence, but does occur often enough to warrant careful study of tissue removal by subtotal thyroidectomy. Radical removal of the thyroid remnant on the affected side is indicated if malignant changes are found.

[6] Lahey, F. H., Hare, H. F., and Warren, S.: Carcinoma of the Thyroid Annals of Surg. 112, 977-1005, 1940.

ANESTHESIA IN ABDOMINAL SURGERY*

EDWARD B. TUOHY, M.D.‡

WASHINGTON, D. C.

AN accurate evaluation of the patient's physical status and emotional stability is of primary importance when considering the agent and method of anesthesia for abdominal surgery or, in fact, any surgical procedure. It is erroneous to believe that premedication will transform the high-strung, emotionally unstable individual into a docile, placid person in every instance. Premedication does assist the patient in quieting his "nerves" and allaying apprehension, but it does not produce an attitude or state of reconciliation which will permit the unlimited choice of anesthesia in all surgical procedures. We must admit, as anesthesiologists, that certain individuals, because of their fortitude, cooperativeness and understanding, permit and make possible certain types of anesthesia. On the contrary, the most skilled, persuasive and competent anesthesiologist may not be able to cope with the excitable and fearful patient. All of the medical data pertinent to the individual patient should be considered by the anesthesiologist and surgeon. Then the patient should be informed that in the opinion of the anesthesiologist and surgeon, such a type of anesthesia would be best suited for the operation indicated or required. This approach assures the patient that two individuals, at least, are interested vitally in a problem which has given them considerable concern.



In a broad sense I think it unwise for the anesthesiologist to be dogmatic and "hidebound" in choosing routinely the agent and method of anesthesia. All too frequently data are forthcoming from several sources which are pertinent and it behooves the anesthesiologist to "listen" and then "suggest."

The close teamwork between surgeon and anesthesiologist is aptly put by Gillespie,[1] who draws the analogy between the surgical team and a two-ball foursome in golf. The spirit of sportsmanship and integrated effort is singularly analogous. One "poor shot" should evoke support from the partner and not undignified acquiescence or unwarranted criticism. In short, the major mistake made in selecting an anesthetic for abdominal surgery is, to continue the golfer's viewpoint, "under-clubbing." This means the choice of an agent or method which has little chance of supplying the required anesthesia and surgical relaxation. We have attempted to reach a "certain distance" with "too short a club."

There is no substitute for the experience gained by the surgeon and the anesthesiologist working together. Therefore, only certain general considerations should be made in the choice of anesthesia. I believe there is little doubt that the greatest percentage of abdominal laparotomies are performed with the patient under general anesthesia, for which purpose ether is probably the main anesthetic agent. Nitrous oxide or perhaps ethylene is used as the induction agent. The almost universal safety of ether for children and adults makes it very popular.

Cyclopropane, because it is pleasant to inhale, nonirritating and rapid in its action, is quite a favorite anesthetic agent. Curare has enhanced the utility of cyclopropane because it will produce the necessary muscular relaxation without the prerequisite of deep anesthesia. Curare can be used with advantage along with gas, oxygen and ether vapor in certain instances. Only one-third as much curare is needed with ether, however, as is required with cyclopropane. A point worthy of emphasis is the fact that curare should be administered slowly, intravenously, when used with inhalation or intravenous anesthesia and the anesthesiologist should be prepared to intubate the trachea for purposes of artificial pulmonary ventilation should apnea occur. Do not rely on any pharmacological antidotes, such as prostigmine or eserine, when confronted with respiratory arrest.

INHALATION ANESTHESIA FOR ABDOMINAL SURGERY —FUNDAMENTAL CONCEPTS AND INTERPRETATIONS

Whether the agent be ether, nitrous oxide, oxygen and ether, cyclopropane, or chloroform, an adequate airway must be provided. The secret to smooth inhalation anesthesia depends on an unobstructed airway and proper dosage of the agent. Intratracheal anesthesia is well accepted and it should be used when an airway cannot be provided for or maintained by other means or devices, such as mouth or pharyngeal airways. A distended stomach, from food or liquids, aerophagia, or gas from an improperly handled anesthesia, is one of the major stumbling blocks to the production of good anesthesia and relaxation of the abdominal muscles. Time and effort will be saved if a large bore stomach tube is inserted when a dilated

* Presented before the Section on Anesthesia of the Indiana State Medical Association, at the annual session in French Lick, on October 29, 1947.

‡ Professor of Anesthesiology, Georgetown University Medical Center, Washington, D. C.

[1] Gillespie: Editorial, Anaesthesia and Golf: An Analogy. Anesthesiology. 3:683-685 (Nov.) 1942.

stomach is encountered. Among other things, the "ballooned stomach" seems to limit the diaphragm movements and definitely decreases the respiratory minute volume. This decrease in tidal volume prolongs the period required to take up the anesthetic agent by the body tissues.

It may seem superfluous to comment on the dangers of "crowding" or attempting to hasten the depth of anesthesia, but laryngeal stridor is the penalty usually encountered. Heaving, labored and jerky respirations are all well known and unwelcome.

Sometimes the discontinuing of the anesthetic momentarily, allowing a few breaths of air, will cause striking results. The labored respirations may subside immediately. All too frequently the anesthetic mixture is too concentrated and irritating to permit smooth respiration. When the inhalation method of anesthesia is used the quality and safety of the anesthesia depends on the proper concentration of the agent in the blood and body tissues. Whereas curare or curariform agents will assist materially in obtaining relaxation, they should not be used unwisely. Do not overlook the use of drop ether when the caliber of anesthesia is unsatisfactory by means of a gas anesthetic apparatus.

Regional and Spinal Anesthesia in Abdominal Surgery

For the most part we reserve the use of regional anesthesia, local infiltration, field block or intercostal block for debilitated patients requiring surgery. Regional anesthesia in such patients may be combined with light gas anesthesia or intravenous anesthesia, if necessary. Spinal and continuous spinal anesthesia are rarely challenged for their efficiency in producing anesthesia and relaxation, but rather for some of the so-called "untoward results." Carefully administered spinal anesthesia, whether in single or fractional doses, is criticized frequently without justification. Management is the keynote of all successful anesthesia, not the agent or the agents. It is possible, in the hands of qualified anesthesiologists, to administer fractional spinal anesthesia, with minimal risk, and such complications as nausea and vomiting may be controlled by the judicious use of intravenous anesthesia. Recall the original statement, that in the presence of adequate anesthesia patient cooperation is as important in regional and spinal anesthesia as unusual skill and dexterity.

By comparison, therefore, one must realize that both inhalation and spinal anesthesia have advantages in abdominal surgery. Individual evaluation must be made. The conduct or management in either instance is the important point.

Supportive Measures in Abdominal Surgery

The careful intravenous use of fluids, such as dextrose and saline solutions, and blood transfusion are important. Blood should be used whenever the patient's condition warrants it, and its use is contingent on the physical status of the patient prior to operation, and on the amount of blood loss and trauma during surgery. It is safer to anticipate the possibility of surgical shock and to take measures to prevent it. In other words, the prophylactic treatment of "shock" is better than the therapeutic.

When extensive surgical operations are contemplated, the patient should be typed for blood group and the Rh constituent. Cross matching of the donor's and recipient's blood should be done. Blood banks have simplified the transfusion problem and there is little excuse for not preparing for transfusions. Certain vasopressor agents, such as the soluble salts of ephedrine and neosynephrine, are of definite service to help maintain blood pressure and capillary tone, when used either alone or in conjunction with the intravenous use of various types of fluids. These agents should not be relied on entirely to maintain blood pressure. They are effectively utilized on a temporal basis to support blood pressure until fluids or blood can be administered. The use of styleted needles (No. 15 gauge) placed into a suitable vein prior to surgery is a valuable practice. Time then need not be lost in "fumbling" with intravenous technicalities.

The anesthesiologist should be prepared to perform two endoscopic procedures when required; namely, suction bronchoscopy and the introduction of drainage tubes into the stomach. When mucus or vomitus is present in the trachea it should be aspirated. If the amount is large the patient should have the benefit of bronchoscopy as soon as possible. When the occasion arises, suspected or unsuspected, when a Levine type of tube is needed in the stomach, with the patient under general anesthesia the anesthesiologist has facilities to pass these tubes immediately.

The Management of Difficult Surgical Interventions

Let us consider briefly some of the outstanding acute surgical laparotomies. An ectopic gestation with massive hemorrhage, in my opinion, should not have spinal anesthesia because the vasomotor system is working at maximum capacity to sustain circulating blood volume. Spinal anesthesia is quite likely to precipitate blood pressure to dangerous or fatal levels. Ethylene or cyclopropane and oxygen seem to me to be more rational and safe. The strangulated hernia (inguinal, femoral, etc.) or intestinal obstruction from whatever the source, which has been present in excess of forty-eight hours, should be considered carefully. Spinal anesthesia, whether single or continuous, may cause a perforation of the bowel at the site of obstruction because of the action of spinal anesthesia on the gut. The intestines are contracted by spinal and this action may provoke a "blowout" in the bowel.

The ruptured peptic ulcer, which usually presents board-like rigidity of the abdominal muscles, but no other signs of shock, is usually a reasonable candidate for spinal. The patient with abdominal distention and rigidity due to massive peritonitis may have either spinal or general anesthesia. The underlying cause may be the deciding factor, along with the physical condition of the patient.

Premature separation of wound edges with evisceration presents a difficult problem for the anesthesiologist. In general, I prefer to use local anesthesia combined with curare. A very minimal amount of pentothal may be supplied.

Upper abdominal operations in obese, short, stocky individuals require special considerations if spinal anesthesia is used. Care must be exercised to control the height of the anesthesia. The repair of a diaphragmatic hernia by the abdominal approach usually requires absolute inactivity of the diaphragm, and then controlled respiration under general anesthesia is most satisfactory.

General anesthesia in the presence of intestinal obstruction should be maintained with endotracheal technic because vomiting by reflex peristalsis may occur. I have seen patients practically drown as a result of this mishap. The endotracheal tube is the best safeguard to prevent tracheal aspiration of vomitus.

Infants and children who require abdominal surgery present fewer anesthesia difficulties. In the care of the former, local anesthesia will suffice for pyloric stenosis operations, and drop ether augmented with oxygen is, in my opinion, one of the safest anesthetics for other abdominal operations.

Summary

The choice of anesthesia for abdominal surgery cannot be stated didactically. Of more importance than the anesthetic agent or procedure is the skill and judgment of the anesthesiologist. Of practically equal importance is the teamwork and understanding between the surgeon and anesthesiologist, which will serve to give the patient the safest anesthetic agent possible and in a sufficiently satisfactory manner so that the best surgical result can be accomplished.

General anesthesia has its own place as a choice of procedure in abdominal surgery. Likewise, regional anesthesia, including spinal, has its merits. Various agents, such as pentothal sodium, curare and cyclopropane, can be employed in combination with other anesthetic agents and procedures. Each case should be evaluated and wherein possible the anesthesia "tailor-made" for the operation to be done, keeping in mind again the fact that the greatest safety to the patient is of first importance.

TREATMENT OF LONG BONE DEFECTS BY BONE GRAFTS

Carlo Scuderi, M.D.*

CHICAGO

LARGE bone defects are very uncommon, secondary to civilian or industrial accidents. Occasionally in a large orthopedic practice a few cases every year come into the hands of competent orthopedic surgeons, with the problem of filling in a defect of one of the long bones produced by loss of bone substance secondary to a compound fracture.

During the recent conflict a large number of casualties were returned to the Zone of the Interior and placed in highly specialized general hospitals. Here the infection and soft tissue trauma had to be successfully combated, cured and repaired, and then it became the duty of the orthopedic surgeons to re-establish the continuity of the bone and produce an extremity that was able to stand the daily wear and tear of living in civilian life. These cases presented a real problem. Fortunately the Surgeon General's office had placed competent, well trained orthopedic surgeons from civilian life in charge of the orthopedic sections of the large general hospital in the Zone of the Interior. Within a relatively short period of time these cases were being successfully treated in the various installations.

The author gained his experience in one of the large general hospitals which was designated as an orthopedic center, where he remained for a period of approximately two years in charge of the orthopedic section. Upon this experience the author is presenting the material and the facts which he learned during this period of time.

It is a well known principle of orthopedic surgery that no form of definitive bone work can be

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performed until all of the bone and soft tissue infection has been cleared up and has remained clean for a minimum of three to four months. In order to obtain this goal, it was necessary to debride the wounds carefully, remove all dead bone and foreign bodies, such as metallic fragments from bullets, shrapnel or land mines. The cleaning up of chronic infected sinus tracts many times offered a serious problem. Most of these cases were successfully treated by the careful cleansing of the infected area, without sacrificing healthy bone or healthy soft tissue. Many of these cases could be closed by interrupted black silk sutures, with a small amount of sulfanilamide placed in the wound, and then treating it as a closed wound, instead of the old, well known Orr treatment, which required packing of the wound with sterile vaseline packs.

In the author's experience about 85 per cent of chronic osteomyelitis cases in battle casualties treated by this method healed by primary intention. Fifteen per cent broke down and required further surgery. The wide saucerization used by some men was found to be thoroughly unnecessary, and definitely harmful in many cases.

In some cases, in order to close the defect it was necessary, in deep, wide wounds, after the thorough cleansing of the area and the packing with Dakin's solution dressings for a matter of three to five days, to place a dermatome skin graft into the defect. In most of these cases primary healing of the skin graft was obtained.

This procedure was popularized by Dr. Robert Kelly of Ashford General Hospital. This method has been known for many years but forgotten until the present conflict. At a later date, after the area had remained clean and healthy for a considerable period of time, skin grafts of the full thickness type could be performed, either as a swinging graft or as a pedicle graft from the opposite leg to fill in this defect. It is most imperative that the area be covered by healthy, full thickness skin with a good underlying subcutaneous tissue. With the use of the Padgett dermatome many of the orthopedic surgeons became very skilled in the swinging of full thickness grafts and the transplantation of the dermatome grafts to fill the denuded area created by the full thickness graft. In hospitals where plastic surgeons were assigned, this work could be carried out by teams.

The pre- and postoperative use of sulfa drugs and penicillin has done a great deal to permit surgery which formerly was impossible. By the use of these drugs, dormant organisms did not have an opportunity to flare up and cause reinfection, and outside organisms could be held in abeyance from producing secondary infections.

The wonderful work done by the doctors at the front, with a better understanding of debridement and drug therapy, saved a great many lives and limbs which, in the conflict of 1918, would have resulted in complete amputation or death. For this reason, the number of large bone defects in long bones have been the most numerous, in the history of men, from the years of 1941 to 1945.

After the infection had been completely cleared up and the injured area covered with healthy skin and subcutaneous tissue, the orthopedic surgeons then had to devote their time to restoring, as nearly as possible, the normal contour of the bone. Three types of bone are available for this type of work. Cancellous bone from the wing of the ilium is excellent for filling in cavities that do not require mechanical stability. A large number of grafts can be taken from the wing of the ilium without materially affecting the stability of the pelvis.

When a large bone defect had to be bridged, and mechanical stability was necessary, tibial bone grafts were found to be most efficacious. The author preferred using the crest of the tibia when it was necessary to have mechanical stability in addition to fresh bone. This was found most essential in long grafts of the humerus or the femur. When grafts were required for bones that did not need the mechanical stability of the crest of the tibia, tibial grafts were removed from the central part of the tibia, which gave adequate bone and did not weaken the tibia as much as the removal of the graft from the crest frequently did. This type of graft was more commonly used in the radius, ulna or fibula. In the tibia proper it was advisable, in many cases, to do a massive sliding bone graft from either the proximal or distal fragment across the defect and then the intervening gap could be filled in with cancellous bone from the wing of the ilium.

Fibular grafts were found to be excellent where a large area had to be bridged, such as a bone defect of five or six inches. Long grafts up to eight inches could be removed from the fibula without materially damaging the leg, providing of course that the fibula was removed, leaving the head and also the lower three inches of the fibula intact, so as not to damage the peroneal nerve in one instance, and so as not to affect materially the stability of the ankle mortise, in the other. In spite of the fact that some men have condemned full thickness fibular grafts, it was the author's personal experience that they served beautifully in the reconstruction of the radius and ulna or in the filling in of a large defect of the humerus or femur. In a number of instances the author used full thickness fibular grafts in conjunction with long tibial grafts to fill in the defect in a femur where a large amount of bone was necessary to make a stable extremity.

It is a well established fact that firm stability of the graft against the host bone is most essential if one hopes to obtain the greatest number of successful takes. For this reason it is necessary to prepare a bed in which the graft should be fitted, and this bed should be made as accurately as possible so as to permit the maximum amount of bone contact, bringing fresh bone against fresh bone. The graft then had to be cut to fit into the

prepared area so that it had snug fitting edges and a very firm, flat base. In order to fix the graft firmly, stainless steel screws are far superior to any other form of internal fixation, such as wire, beef bone grafts or autogenous bone grafts which have been threaded.

The War Department and the Bureau of Standards in Washington have standardized the metal to be used, and the present stainless steel screws have been found to produce no tissue reaction even after several years of being buried in the tissues. At the present time these standarized screws are obtainable through any surgical house. Unless there is presence of infection, the author has never seen any corrosion around the present standardized stainless steel screws as a result of tissue reaction.

By the careful observation of the above mentioned principles, the author was able to do ninety-four massive bone grafts successfully with a loss of three grafts due to infection and a fourth one due to a refracture, requiring a second graft to be applied to the area.

The bone graft surgery does not terminate with a successfully done piece of carpentry in the operating room, but these cases must be watched for many months thereafter, to be sure that the grafts become firmly adherent and the external immobilization is not removed too early and the grafts refractured. It has been the author's experience that bone grafts require a long period of external protection. Plaster of paris is found to be the best form of external support for a bone graft. Grafts to large defects of the femur frequently required immobilization for five to six months in plaster, and then from three to six months thereafter in a walking caliper. Fractures of the tibia and humerus frequently required immobilization for three to four months by firm plaster cast and later supported by various types of braces.

In this type of work it was found that callus formation was not exuberant as was found in ordinary clean fractures, but the graft would become firmly united to the host bone in one homogeneous mass, with very little extra osseous callus formation. In many instances it is difficult to determine whether or not the union is solid enough to permit the removal of external immobilization. Great care, skill and judgment are necessary in making this decision. Very frequently, due to the constant annoyance of the patient and the outside pressure exerted by friends and relatives, one is tempted to remove the immobilization before sound surgical judgment would indicate the procedure. Only when one has had several unhappy results does he learn that wishful thinking is not the successful way of treating a massive bone graft.

The large number of major battle casualties who have returned to civilian life and are able to make a gainful livelihood and enjoy the usual routine of civilian life, will be a living memento to the men in the service who did reconstruction surgery of a type, magnitude and numerical volume that heretofore has been unknown.

IMMUNIZATION—THE DOCTOR'S RESPONSIBILITY

J. W. Jackson, M.D

INDIANAPOLIS

WHO is in a better position than the family doctor to promote immunization effectively? No one, for his training, his intimate association with those he serves, and the boundless confidence his patients have in him make him a leader whom all are willing to follow. The progressive layman realizes that the employment of a competent physician to guide his household in health as well as in sickness is the best investment he can make to insure maximum health. The public should be encouraged to obtain preventive service from private physicians.

Because of individual idiosyncrasies in interpreting medical ethics some doctors have hesitated to advise procedures for which they naturally would expect pay. Some local medical societies have adopted policies with respect to immunization that for one reason or another fail to secure a safe level of herd immunity. Some doctors have not satisfactorily achieved an important objective of general practice—*the development of an insistent demand for immunization.* All of these factors have contributed to the unsatisfactory status of prophylaxis in communicable disease control in Indiana.

Evidence is available to confirm the existence of an unwarranted complacency among Hoosiers with respect to Indiana's accomplishment in the prevention of contagion. For example, we may refer to a comparison of the present status of smallpox in Indiana and other states.[1] The incidence of smallpox in the United States declined from 48,920 in

[1] Statistical Bulletin of the Metropolitan Life Insurance Company, 27:8-10, May, 1946.

1930 to 333 in 1946; in Indiana, from 1,354 cases in 1930 to 42 in 1946. From these data we see at a glance the decline in the incidence of smallpox in the United States as a whole was about 4.5 times as great as in Indiana. Actually, Indiana may have the highest incidence of smallpox of any state in the United States.[1]

TABLE I

Cases of Smallpox Reported in the United States and Canada, 1943-1945

State or Province	Number of Cases 1945	1944	1943
United States	346	384	765
Alabama	5	0	18
Arizona	6	2	1
Arkansas	31	29	45
California	7	20	4
Colorado	5	10	8
Connecticut	0	0	0
Delaware	0	0	0
District of Columbia	0	0	0
Florida	0	1	2
Georgia	10	7	12
Idaho	13	8	7
Illinois	13	13	68
Indiana	50	38	129
Iowa	10	33	26
Kansas	17	15	25
Kentucky	5	10	13
Louisiana	8	11	4
Maine	0	0	1
Maryland	0	0	1
Massachusetts	0	0	0
Michigan	16	10	18
Minnesota	3	1	0
Mississippi	25	14	14
Missouri	12	9	6
Montana	4	12	7
Nebraska	11	6	18
Nevada	4	1	1
New Hampshire	0	0	0
New Jersey	0	0	0
New Mexico	4	3	4
New York	0	0	0
North Carolina	1	4	21
North Dakota	10	5	3
Ohio	8	13	118
Oklahoma	11	7	19
Oregon	6	3	13
Pennsylvania	0	0	8
Rhode Island	0	0	0
South Carolina	2	6	4
South Dakota	6	11	19
Tennessee	8	8	21
Texas	9	32	86
Utah	3	0	1
Vermont	0	0	0
Virginia	1	1	0
Washington	8	11	6
West Virginia	0	5	5
Wisconsin	12	15	9
Wyoming	2	1	0
CANADA	5	1	6
British Columbia	0	0	0
Manitobia	0	0	0
New Brunswick	0	0	0
Alberta	0	0	2
Nova Scotia	0	0	0
Ontario	0	0	0
Prince Edward Island	0	1	0
Quebec	0	0	0
Saskatchewan	5	0	4

Reference to Table I reveals that in 1945 no smallpox occurred in thirteen states and the District of Columbia. In nine of these states this record has been maintained for three years. Rhode Island has not had a case since 1928. On the other hand, Indiana for three successive years has had the largest number of cases in the country. The infection was probably not imported from adjoining states for the four states, Michigan, Illinois, Ohio and Kentucky, together had fewer cases than Indiana in spite of the fact that their total population was six and one-half times that of Indiana's. The case rate of the four adjoining states was less than 2 per million population; Indiana's was 14.5 per million.

Another example of the failure of some communities and some individuals to discharge fully their responsibilities in guarding against communicable diseases is our record in immunizing against diphtheria. Reports received at the State Board of Health are of course not a complete record of all that is done in Indiana, but they serve as an index. As such, they appear to indicate that some communities do not have a planned program that functions year after year. Sporadic programs induced

Chart I

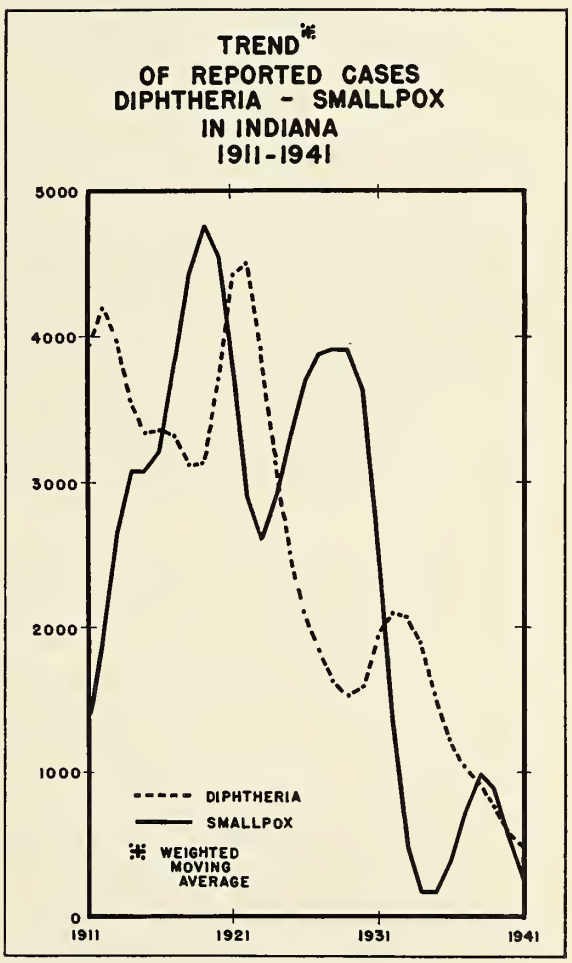
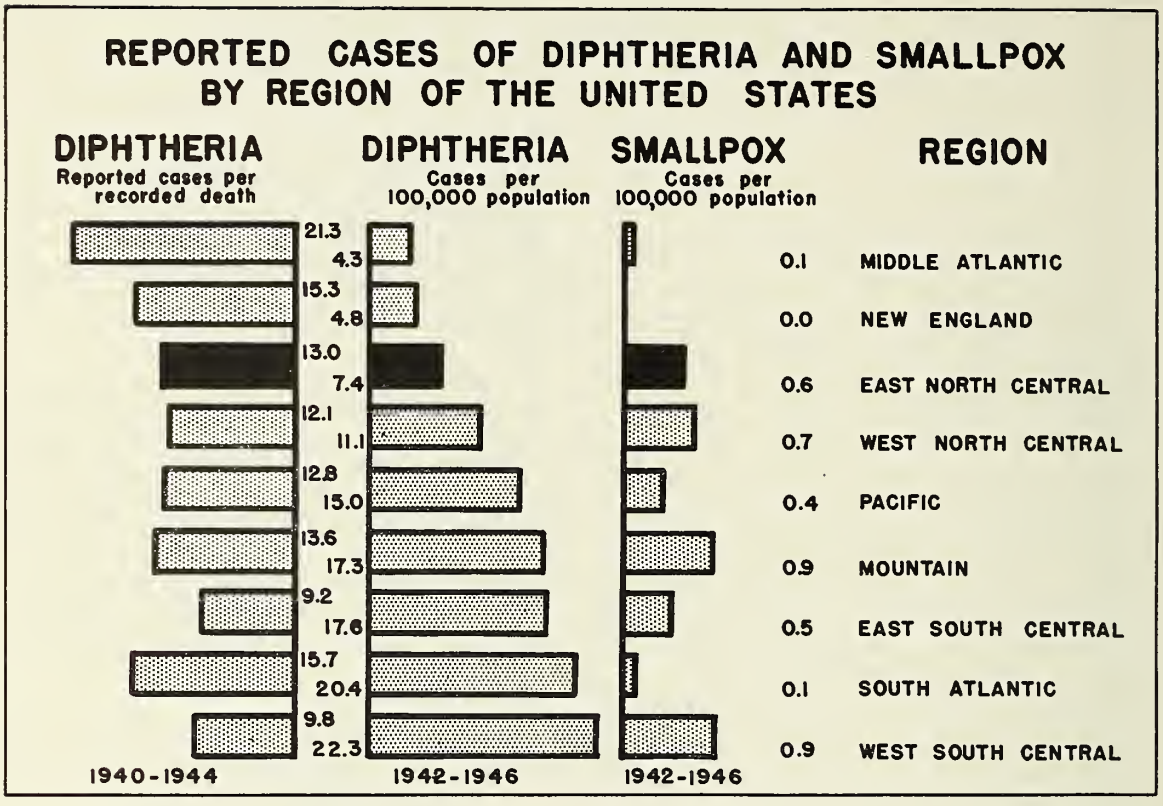


Chart II



by an unnecessary tragedy may be of some value but they do not yield continued protection or tend to develop proper attitudes in healthful living.

However, the actual accomplishment of the physicians and health officers in Indiana in the control of diphtheria and smallpox is in reality a notable achievement. It may best be visualized by a graph showing trends of incidence of each of these diseases. Such a graph was prepared by the Division of Public Health Statistics of the Indiana State Board of Health, by the use of a weighted moving average. The statistical data from 1911 to 1941 are presented in Chart I. A remarkable reduction in the incidence is noted in spite of frequent, periodic reverses.

Chart II shows the relative standing of different sections of the United States in recent years. With respect to diphtheria, the East North Central States, which include Indiana, are not in an unfavorable position, although it can be seen there is room for improvement. With respect to smallpox, this region of the country is in a less enviable position.

Chart II also shows the ratio of reported cases to reported deaths for diphtheria for each region. Since it is known that deaths are more completely reported than cases, a high ratio for an area indicates either better reporting or lower case-fatality. In either case a high ratio of cases to deaths is a favorable attribute of an area. It will be noted that the New England area, which has the lowest case incidence, has the highest case-death ratio, one which is significantly higher than the East North Central States. Similar ratios are not shown for smallpox, since the number of deaths has been so few in recent years that the comparison can be made only for very large areas.

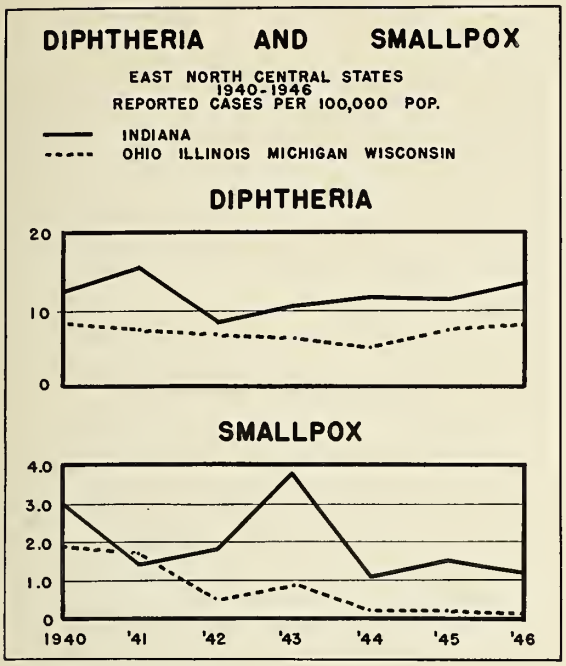
Among the East North Central states themselves, the case-death ratios for diphtheria are not significantly different when annual variation is given consideration. For the period 1940 through 1944 these ratios are: Illinois, 11.7; Indiana, 13.8; Michigan, 12.5; Ohio, 14.6; and Wisconsin, 16.1.

The total reported cases per 100,000 population for both smallpox and diphtheria are shown in Chart III for Indiana in comparison with the other East North Central States as a group. While Indiana was in a favorable position in 1941 with respect to smallpox, its record since that time has not equaled that of its sister states. Indiana's position with respect to the incidence of diphtheria could also be improved. To a lesser extent this is also true of all the states in this group.

In a survey of existing statutes William Fowler[2] found that nine states and Alaska have express provisions requiring immunization against diphtheria. In Alaska, North Dakota, Virginia, New

[2] Fowler, William, U. S. Public Health Reports, 57: 325-328, March 6, 1942.

Chart III



Jersey and North Carolina, the requirement is statutory. In Illinois, Kansas, Kentucky, and New York the requirements are found in the regulations of the State Board of Health. Such regulations usually have the force of laws. The general immunization of children is required in only one state, North Carolina. Here the statute applies to children between six and twelve years of age and to those between twelve months and five years who have not been previously immunized. This statute excepts children whose parents or guardians are bona fide members of a religious organization whose teachings are contrary to the practices required by law.

North Dakota has a statute which forbids making any form of vaccination or inoculation a condition precedent for admission to any public or private school or college or for the exercise of any right, the performance of any duty, or the enjoyment of any privilege.

Indiana has no law requiring immunization. Furthermore, Regulation HCD 54 provides for the observance of due regard for religious freedom in the control of communicable diseases.

During the year of 1946 two deaths from laryngeal diphtheria occurred in Indiana. Neither of the children had been immunized. It is true that persons previously immunized against diphtheria nevertheless have acquired a fatal form of the disease. This is now very rare. A number of Hoosier communities have a record of no deaths from diphtheria for a period of several years. Hence, many theorize that every death from diphtheria is a preventable death. Poverty is not an excuse for failure to immunize.

Hospitalization was sought for each of the two cases discussed above. Many of the smaller hospitals in Indiana do not admit contagious cases. Instances of refusal to admit cases of laryngeal diphtheria that were at the very point of death are known. Although the law permits the hospital board to decide on what disease may be admitted to that hospital the policy of excluding all contagious cases does not appear to be justifiable from the medical viewpoint. Some argue the purpose of the hospital should be to serve all of the public. Communicable diseases will continue to occur in all communities. Provision should be made in local hospitals to care for certain of the contagious diseases that may need hospitalization and for cases that develop after hospitalization.[3]

The regulations of the Indiana State Board of Health provide that: "A hospital may accept any case of communicable disease on any floor or ward (excepting maternity and newborn nursery), providing proper isolation and aseptic nursing technique are meticulously followed and provided smallpox, chickenpox, measles, whooping cough, and influenza shall not be routinely hospitalized, except in case of an emergency, or except when the hospital has a properly equipped isolation ward." Since the boards of some hospitals are composed of laymen, doctors in the community must aid in the clarification of the responsibilities of hospitals.

Two fundamental factors that motivate the layman to seek immunization are *education* and the *menace of endemic contagious disease*. However, Hampton[4] believes some type of directive law requiring vaccination as a prerequisite to school attendance is the best method of control. This would tend to provide a continuing protective procedure that would prevent the development of large reservoirs of susceptibles. Some authorities express the opinion that legislation is indicated unless 40 per cent of the children voluntarily seek vaccination. However, "Most public health officials have looked with little favor upon such regulations, even though defending compulsory vaccination. They have felt that compulsion should be used as sparingly as possible and should be reserved for those situations that are of major potential danger and controllable through no other procedure."[5]

It is apparent that the doctor is indispensable in communicable disease control. His responsibilities are so widely varied he needs a planned program of his procedures in prophylaxis. The following suggestions may help him formulate a code suitable for his individual needs.

The doctor's program may well start before the birth of his patient and be continued thereafter through all age groups. His services before birth

[3] Editorial, The Commission on Hospital Care, J.A.M.A. 132:789, 780, Nov. 30, 1947.

[4] Hampton, Brock C., United States Public Health Reports, 58:1771-1778, Dec. 5, 1943.

[5] Anderson, Gaylard, W., M.D., and Arnstein, Margaret C., R.N.: Communicable Disease Control. New York, The MacMillan Company, 1942, p. 92.

are varied and extremely important. For example, the family physician can explain to prospective parents the probabilities of the transmission of certain hereditary defects. He can describe the terrible risk to a newborn child when one or both of its parents have active tuberculosis. He can stress diagnostic serology early enough that if treatment is indicated it can be administered in time to assure a healthy child. He can emphasize isolation and hygiene so essential to guard the infant against the upper respiratory and enteric infections so dangerous to the newborn. In addition, he may elect to immunize nonimmune, prospective mothers, hoping some portion of the antibodies may enter the blood of the fetus. In this manner some degree of protection might be attained until more satisfactory procedures can be invoked after the defense mechanism has begun to function.

Another possible potential service of the doctor might be to advise that females have German measles during childhood, or at least before marriage. There is evidence both for[6] and against[7] the theory that infection with rubella during the first three months of pregnancy may result in serious defects to the child.

The doctor's program includes some "immunization mays."[8] Conditions do arise when staphylococcus toxoid, staphylococcus antitoxin B, tularemia antiserum, anti-anthrax antiserum, botulinus antitoxin, pertussis vaccine, detoxified pertussis antigen, poison ivy antigens, lymphogranuloma antigen test, human convalescent measles serum, placental immune globulin, and immune serum globulin may be tried. However, the evidence of the value of some of these biologicals is poor. The Schick test is nearly 100 per cent accurate. The Dick test is of practical value.

The value of encephalitis serum, dysentery serum, mumps serum, Kreuger's Undenatured Bacterial Antigen, local applications of Topagen and convalescent poliomyelitis serum (human) has not been established.

The doctor's program will include certain "immunization musts."[8] It is commonly recognized that occasions frequently arise when certain passive immune principles must be used for the induction of passive immunity and for treatment. These include: diphtheria antitoxin, tetanus antitoxin, streptococcus antitoxin, and rabies vaccine. If the patient is too poor to pay, the attending physician may secure a Free Antitoxin and Vaccine blank from the local health officer having jurisdiction. This blank, properly filled out, constitutes a legal claim for the market price of antitoxin or virus furnished against the county, city or town in which it is used and in which the blank is issued.

Other "musts" in the doctor's program are based on the principle that every child be vaccinated against smallpox, immunized against diphtheria and tetanus, immunized against typhoid fever in certain areas, injected with rabies vaccine if the need arises, given a tuberculin test and inoculated with tetanus toxoid when exposure occurs in one previously immunized.

Suggestions for a practical program of immunization "musts" for the layman have been considered elsewhere.[9] Additions and amplifications for the doctor's consideration may include:

1. At the age of 2 to 6 months vaccinate against smallpox. Repeat at 6 and 12 years of age, at intervals of 7 years thereafter, and whenever an epidemic occurs. Use fully potent vaccine that has been kept in the freezing compartment of the refrigerator. Outdated vaccine should be discarded. Use the full contents of a capillary for each vaccination, for the virus-laden lymph may separate from the glycerin. The latter is relatively inactive. The use of antiseptics, such as alcohol, mercurochrome or iodine, on the site of a vaccination may inactivate the virus. The multiple pressure technique appears to be superior, but the pressure should be sufficient to break the epidermis. Bleeding should not occur. No bandage or shield should be applied. A definite vesicle appearing at the site of the vaccination on the sixth or seventh day is unmistakable evidence of a successful result. The immune reaction is described as a deep-seated, indurated swelling that first appears 24 hours after vaccination and subsides gradually without developing into a vesicle or a pustule. Examine revaccinated persons on the third day following vaccination, to record immune and accelerated reactions. Vaccination is contraindicated[10] in those with chronic dermatoses in whom generalized vaccinia may occur. "Exzema vaccinatum"[11] can usually be eliminated by postponing vaccination until the skin disorder has been cured and by preventing intimate contacts of such individuals with recently vaccinated persons.
2. When the infant is 5 to 9 months of age immunize against whooping cough. Diphtheria immunization may be combined with it. Children should have a boosting dose

[6] Conti, W. R., M.D., and McCammon, C. S., M.D.: Congenital Defects Following Maternal Rubella, Am. J. Dis. Children, 70:301-306 (Nov., Dec.) 1945.

[7] Fox, M. J., M.D., and Bortin, M. M., M.D.: Rubella in Pregnancy Causing Malformation in Newborn. J.A. M. A. 130:568-569, 1946.

[8] Report of the Committee on Therapeutic Procedures for Acute Infectious Diseases and on Biologicals of the American Academy of Pediatrics, 1945, p. 53.

[9] Jackson, J. W., M.D.: *Immunize Now*, Hygeia, February, 1947, p. 107.

[10] Russell, Frederick, R.: The Epidemiology and Control of Variola, Virus and Reckettsial Diseases, Harvard University Press, 1940, p. 196.

[11] Ross, Ralph A.: Generalized Vaccinia, Virus and Rickettsial Diseases, Harvard University Press, 1940, pp. 217-225.

against diphtheria and probably also against pertussis on entrance to school.

3. At the age of 9 to 12 months immunize against tetanus. Diphtheria immunization may be combined with it. To retain a high immunity against tetanus a boosting dose may be administered yearly, and following exposures.

4. At the age of 18 to 24 months reimmunize all children reacting to the Schick test.

5. Make a tuberculin test on all children at the age of 3 years, and every third year thereafter up to the 18th year.

6. At the age of 2 to 4 years immunize against scarlet fever. Have the result checked later by means of the Dick test. The majority of doctors have not favored the use of the Dick toxin because of the number of injections required, the frequency of undesirable reactions, and the necessity of meticulous attention to details of technique. Reactions may be reduced by graduating the dosage in accordance with the reaction to the Dick test. Various modifications of dosage have apparently yielded satisfactory results in some cases. However, extensive trial over a period of years does not seem to warrant recommendation of the Dick material and method in mass prophylaxis against scarlet fever. Some advise it for those especially exposed and for selected cases. Streptococcus toxin prepared according to the recommendations of Veldee and administered in three 0.1 cc. doses subcutaneously at intervals of two to three weeks apparently has given satisfactory immunity with a minimum of undesirable reactions. This product or some modification thereof appears worthy of further trial.

7. At the age of 5 to 6 years reimmunize against smallpox. Also give a reinforcing immunization against diphtheria to children who are Schick positive.

8. At the age of 8 to 12 years, immunize against typhoid. In an emergency this may be done at any age. Persons who are especially exposed may renew their immunization at yearly intervals. Renewal of immunization may be accomplished by the administration of 0.5 cc. subcutaneously or the intracutaneous injection of 0.1 cc. of the biological.

9. Influenza vaccine may be administered by physicians to selected patients for prophylactic purposes. It is believed to be effective but its administration has apparently resulted in numerous instances of undesirable reactions. However, some aver only the mildest reactions occurred. Vaccination consists of a single dose of 1.0 cc. of the vaccine administered subcutaneously. Precautions should be taken not to administer the vaccine to persons sensitive to eggs.

Indiana should lead the nation in the control of communicable diseases. Procedures conducive to this goal include prompt and complete reporting and the immediate application of effective procedures for the control of outbreaks. Every physician should stress immunization and reimmunization for each of his patients. Doctors should not neglect opportunities for the education of their patients in matters pertaining to immunization, and specific personal and community hygiene. Your State Board of Health will gladly assist you, through the branch office directors, nurses, educators, sanitary inspectors and by the distribution of free biologicals where such distribution appears indicated.

Last, but not least, every doctor and health officer should submit a report of his activities in immunization. Only from such data can an estimate of state-wide accomplishment be compiled.

ACTION NEEDED TO PREVENT EPIDEMIC OF HUMAN PLAGUE IN U. S.

If proper preventive action is not taken immediately, the United States may find itself in the middle of an epidemic of human plague, according to an editorial in the February 14 issue of *The Journal of the American Medical Association.*

The editorial follows:

"Human plague appeared for the first time in the United States in the Chinese quarter of San Francisco March 6, 1900. Between that date and January 1, 1940, eight states reported cases of human plague—Washington, Oregon, California, Utah, Nevada, Texas, Louisiana and Florida. During 1946 infection had been found in ground squirrels and other rodents as far east as the Mississippi Valley. The United States Public Health Service has conducted campaigns for the eradication of infected rodents since 1908. The budget for such eradication dropped from $200,000 in 1912 to $51,000 by 1915. This campaign, coupled with efforts by the individual states, still continues, but has languished considerably.

"R. H. Creel, M.D., estimated in 1941 that a well organized and well sustained campaign financed by approximately $2,500,000 would virtually eliminate rodent plague in the United States. To date the needed funds have not been forthcoming. This condition is a definite threat of human plague in epidemic proportions in the United States. The main conditions necessary for epidemics of human plague are infected rodents, the flea transmitter and susceptible persons in close proximity. Overcrowded housing conditions in many large cities tend toward the establishment of the conditions necessary to epidemic outbreak. Proper preventive action is needed immediately."

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THE JOURNAL'S PLATFORM

1. **Preservation of American Medicine through voluntary service to the sick.**
2. **Advocating full-time county health officers, locally appointed.**
3. **Restoration and preservation of our natural waters and resources.**
4. **Maintain the present high standard of the Indiana University Medical Center, combining the full medical course in Indianapolis.**
5. **Elimination of diphtheria and smallpox through immunization and vaccination.**
6. **Support of the state-wide campaign against undulant fever.**

Editorials

A NEW SURGEON GENERAL

ANNOUNCEMENT is made that as of April sixth, Dr. Leonard A. Scheele will succeed Dr. Thomas Parran as Surgeon General of the United States Public Health Service. Dr. Parran came into office following many years of service in the Health Department of New York.

While we have not always been able to see eye to eye with him in many matters, he has done a good job, though at times we feared he was veering far too far to the "left." True it is that many years of his service were during the war period, years that meant many additional problems, the answer to some being demanded "right now."

Dr. Scheele, we are proud to state, is a native Hoosier, born in Fort Wayne July 25, 1907, which brings him into active service in his very prime. His premedical education was had at the University of Michigan and his medical degree was had from Wayne University, Detroit, in 1931.

He immediately went into Public Health Service, where he held many responsible positions. He spent several years in charge of the National Cancer Control Institute, then was transferred to the Department of Civilian Defense. Later he was with the Army, serving in Sicily, Italy and Germany.

During these years he received many "decorations" for his varied works, including the medal of the Legion of Merit. In 1946 he again returned to his work in the Cancer Field, in 1947 being named as director of the institute.

Our informant remarks that Dr. Scheele is an intense worker and that probably research is his chief hobby. We also learn that Mrs. Scheele is a graduate dentist, that they have three children, and live in a Washington suburb.

We welcome Dr. Scheele as the head of one of the most important medical posts in the nation and wish him every success.

THE HAND

"THE fate of the injured hand rests with the first doctor who treats it."[1]

Sir Charles Bell in 1852 described the hand as "a marvelous mechanism of exquisite design and delicate sensibility." Along with a reasoning brain, the normally functioning hand of man is one of his most outstanding attributes and characteristics.

Let us consider how nature rates the hand. The hand is allotted the largest space in the motor area of the brain. The hand is the most highly developed motor structure in the body. Approximately one-fourth of the pacinian bodies of the total skin area are in the fingers. It is a true saying that "the hand is quicker than the eye." The hand is a finely coordinated, streamlined motor and sensory structure of balanced muscles, tendons, and joints. Without a hand the upper extremity is practically useless. The movements of the rest of the arm are designed to supplement the function of the hand.

The hand is the most exposed and most frequently injured part of the body. Economically, as a rule, when the hand of a working man is injured his means of livelihood is gone. Injuries and infections of the hand cause more loss of working time than any other single condition.

In treating hand injuries, it is important that it be considered as a whole. As well as the tendons, muscles, and joints, the hand needs a sensitive, pliable skin and healthy finger nails. The function of single fingers is coordinated with that of the other fingers. A hand without a thumb is a sorry organ. Nerve injuries leading to causalgia and causalgia-like symptoms practically make a hand functionless. During the war, bullet and high explosive wounds of the arm and hand were especially likely to result in causalgias.

The incidence of infections of the hand is about 3 to 7 per cent every year for each 1,000 population. The mortality rate of hand infections is estimated as equal to that of acute appendicitis. No wound of the hand can be considered too minor for serious consideration. In spreading infection of the hand the most masterful judgment in treatment is necessary.

Ideally, for the treatment of any injury of the hand, only the most expert surgical care should be available from the start. In industry there is no reason why such conditions should not be readily available. Because of the likelihood of hand injury to occur in any situation or in any locality, it is to be expected that the general practitioner will often be the first to see the injured or infected hand.

The fundamental principles for the treatment of hand injuries and infections have been formulated after years of experience in industry and war. These principles have been amply laid down in books and medical journals. Of especial importance are the masterpieces of A. B. Kanavel[2] and of S. Bunnell.[3]

It is to be hoped that the general practitioner and casual operator will acquire a working knowledge of the fundamentals of emergency care for hand injuries and hand infections. If he does not possess expert skill he should know his limitations before attempting other than emergency care.

"The fate of the injured hand rests with the first doctor who treats it."

[1] Dudley, H. D.: "Some Facts About the Hand," West. J. Surg., Obst. & Gyn., 55:419-423, August, 1947.

[2] Kanavel, A. B.: "Infections of the Hand," 7th Ed., Lea and Febiger, Philadelphia 1939.

[3] Bunnell, S.: "Surgery of the Hand." J. B. Lippincott Co., Philadelphia 1944.

JOSIAH KIRBY LILLY

CHAIRMAN of the Board of Eli Lilly Company, one of the world's largest pharmaceutical houses, and well known as a philanthropist, Josiah K. Lilly died at his Indianapolis home on February eighth, at the age of 86. He might well indeed have been accorded the title "Friend of Medicine," for that was what he was. We know of few laymen as well deserving of such a title.

Son of the founder of the company, Eli Lilly, he had spent his active life in carrying on the enormous business of the company, all the while keeping in active touch with the advances in medicine. The Eli Lilly Company is known throughout the world and ever since the days when most of the older members of the profession were medical students, has been generally recognized as a "standard" institution.

Josiah K. Lilly, in addition to directing the large company of which he was the head, found time for other diversions. His gifts to various organizations were many, most of them unheralded. But he had other "hobbies," one of them being the gathering together of all available material concerning Stephen Collins Foster, his life and his songs. The result was that Mr. Lilly, at the time of his death, had accumulated about everything there was to be had on this subject. A house was built on the Lilly estate to take care of this material.

All this shows one "side" of the man; with unlimited means at his command he might have directed his tireless energy into other channels; he might have made a study of other music, just as he might have become a bibliophile—but he chose to become interested in the quaint, plaintive music of another day, music the like of which does not exist any other place in all the world.

The fact that he put the same energy into his business has resulted in the creation of an institution not excelled any place in the world.

The son of the founder, his old-time friends relate that he had many of the characteristics of his father. In passing, it might be proper to relate that the elder Lilly was the first to make the

gelatine capsules now so universally used. We well recall those early days when the taking of calomel and quinine, for example, even with "smothering" of these and similar drugs in a large tablespoonful of applesauce, was not very palatable. (And what doses they were, back in those days. No one ever heard of calomel in 1/10th grain doses!)

No physician of the present day—or even of the past several decades, for that matter—need be told who Josiah K. Lilly was; he is as well known as any of the authors of our textbooks, either old or new. He had gathered together a technical staff such as no pharmaceutical house ever dreamed of having—the list of department heads in recent years provides a "Who's Who" in that industry.

In addition to all this, he was recognized as a "first citizen" of his home city and his native state. In short, he was a "good" man, one to take his place will be hard to find as the years go by.

A BIT MORE RE THE "KICKBACK"

PRESS reports continue to come in regarding this nefarious practice, though some of them indicate the situation is not as bad as was first reported, in that some of the physicians named are in no wise "guilty" of the practice. A late report indicates that ninety Indiana ophthalmologists were named in the original report. These are locted in the larger centers as well as in some of the smaller communities.

(We have checked all the lists that have been published and have been unable to find our name in any of them; this not because of our not having been "invited" to join in the practice, but because we never believed in such stuff.)

The American Medical Association has issued a statement in which it is maintained that many of the nearly three thousand doctors originally included in the report are not guilty of any irregularity, and suggests that Mr. and Mrs. John Q. Public withhold their opinion until the matter has thoroughly been aired by court procedure.

In a recent newspaper story we note that a physician in a West Central state, in discussing the matter, declared that he had recently "been through the mill," his bill for a pair of glasses received from the optician amounting to *forty-five dollars*. However, in due time, he received a check for *twenty-three* dollars from his eye physician, with the notation that this represented the rebate.

It is not anticipated that there will be any prosecution of the doctors involved, only will they be asked to cease and desist from further participation in these practices. We trust that all concerned will do so, thus ending a "sore spot" that has existed over a long period of years.

Editorial Notes

The Surgeon General of the United States Army announces that "doctors are going back to school," meaning that a group of Army doctors from Colonels to Captains are taking up some new work, that of a Basic Science Course. It finally has been recognized that these basic sciences do have a real connection with medicine.

We recall that, several years ago, when some states instituted a Basic Science as a part of the examination for licensure a great hue and cry arose in several quarters, but today it is a commonly accepted practice.

Deaconess Hospital, at Evansville, plans an extensive rebuilding program and from present indications these plans ultimately will be carried out. This is one of the older hospitals of Indiana, having been founded in 1892 through the efforts of a local group of Protestant pastors and laymen.

It is interesting to note that the site selected at that time for the new hospital was the former home of Major Byron Parsons and that during the Ohio river flood of 1884 served as headquarters for Clara Barton of Red Cross fame. It is believed to have been the first organized Red Cross movement in time of local disaster.

The ultimate cost of all new buildings and improvements will reach more than one and one-half million dollars. This will include an enlargement of Barton Hall, the home for nurses; it is estimated that the capacity of this enlarged building will furnish homes for at least 160 nurses.

The present staff numbers more than 150 doctors and the administration of the hospital will continue under the direction of Mr. Albert G. Hahn.

We have been a bit perturbed over some of the statements recently made by Secretary of Agriculture, Clinton Anderson, in an address before a recent meeting of the American Medical Association. He remarked that at the rate we are now going it will take more than a hundred years to provide proper rural medical care for the nation.

Evidently the Secretary did not make an intensive study of the matter, since in the past few years much progress has been made in this direction. Here in Indiana we had come to believe that our native state had made real progress in this direction and that we still are going strong.

We wonder if there might be a little politics mixed up in the Anderson statement; also, whether some of the "authorities" down in Washington whose chief job seems to be to furnish "material" for many such speeches, might have been asked to gather data for the address!

The Anderson Junior Chamber of Commerce recently has joined the already long list of such bodies in the campaign for enrollment of student nurses. This campaign will be carried on in connection with St. John's Hickey Memorial Hospital School of Nurses and is a part of the national effort by the Jaycees.

They have set a goal of 50 new student nurses for the September enrollment. It now begins to look like we will have more nurses within a very short time. But with the help of all these new agencies doctors must remember that they have a most important role in the campaign. They are in almost daily contact with many young women, especially those about to graduate from our high schools and a little effort may persuade many of them to enter this interesting profession.

We finally have gotten around to a bit of comment on a recent honor that came to one of Indiana's "favorite" physicians, Jacob T. Oliphant, of Farmersburg. Of course, every Hoosier physician knows Jake, has known him for many years, hence it is no surprise that he recently acquired some national recognition, having been named one of three in the balloting for the "general practioner award" by the American Medical Association.

For some 42 years Dr. Oliphant has been attending to the medical needs of Sullivan County folk, in the meantime finding time for hyperactivity in his state association. Long ago Jake held the title of "the perfect delegate" from his county, never missed a state meeting and was on the job at every session of the House.

Later on he served four years as a member of the State Medical Board, three of these as its presiding officer. Then he was elected to the office of President-Elect and the following year became "head man" of the Indiana profession. Still later he was named to the editorial board.

Dr. Oliphant is "tops" as a general practitioner —just a doctor, we have heard him say, and this new honor certainly was justly bestowed.

Methodist ministers have enrolled in the campaign for recruiting of nurses in the Indianapolis Methodist Hospital; for some time it has been feared that, due to the nursing shortage, it might become necessary to close some of the 760 beds in this hospital. Of course, most other hospitals have similar problems and will lend every aid to the movement.

A survey of all the medical forces of the armed services is proposed by Secretary James Forrestal and he has named as the head of the survey Dr. Paul R. Hawley, recently resigned as chief medical director of the Veteran's Administration. The choice for the new position would seem to be a most happy one—we know of no one who has better knowledge of the working of the medical services in all branches of the armed services.

Dr. Hawley is well known to Indiana Medicine, being a graduate of our University Medical School.

It seems that our comment on "Kickbacks," in a recent editorial column, has aroused some down-state men, particularly the radiologist group. As a matter of fact, nothing in the editorial even suggested that Indiana radiologists were concerned with the practice, our statement being general in character.

Much of the material in our editorial was taken from various medical journals, including an editorial in J.A.M.A. Some other states, notably California and New York, have made the claim that this group really was indulging in the practice, but, as we have said, no mention was made concerning our own state.

It is unfortunate that the local press got into the fracas, no doubt having much to do with the present uproar. THE JOURNAL regrets that our article was so grossly misunderstood.

President's Page

MEDICAL PUBLIC RELATIONS

"MEDICAL public relations is that process by which the medical profession endeavors to secure the good will and confidence of the public; first, by establishing and maintaining policies and professional conduct that meet with public approval, and secondly, by interpreting these policies by all ethical means of information so that they will be understood and appreciated." This definition of public relations, compiled from many by experts in this field, seems most applicable to our profession.

Good public relations is the desire of every physician and every medical society. How to maintain and improve it has been the subject of a great deal of thought by the A. M. A. and many of the state and county medical societies. Considerable effort and money are being spent today by business executives in behalf of good public relations.

Good public relations requires first, a good product; second, adequate distribution at a reasonable cost; and third, proper understanding by the public. Certainly the medical profession has a fine product in the form of good medical care. Very little complaint exists about the accomplishments of scientific medicine.

Distribution of medical care still leaves some things to be desired. At times the public becomes exasperated because it can't secure a physician at night or in an emergency. Many county medical societies have recognized the desirability of correcting this error and have established a telephone exchange, or utilized the hospital in smaller communities, as a clearing station where a patient can secure a physician when his own doctor is not available. It is true that many requests are not real emergencies, yet there are times when emergency medical care is essential and the medical profession has the responsibility of furnishing that service.

The total cost of medical care, including the many accessories, often is burdensome. Through the wide distribution of the policies of Mutual Medical Insurance, Inc., and Blue Cross Hospital Service, the public has been aided greatly. Both of these projects deserve the united support of the medical profession. These companies are doing a fine job, and comprise one of the best of our public relations efforts.

The medical profession deserves adequate compensation for its services, but there are always a few physicians who blacken the reputation of the whole profession by excessive charges. The intemperate remarks of Dr. Magnuson, medical director of the Veteran's Administration, were directed at relatively few physicians. In our state only five instances have been recorded by our Veterans Committee where it has been necessary to question the conduct of a physician. Yet all of our physicians felt the sting of those remarks and public confidence was undermined.

Much has been stated in the public press about rebates to physicians, which, according to our code of ethics, is wrong. Rebating is probably less widely practiced in Indiana than in some states, but it must be entirely discontinued by the medical profession, if we sincerely desire better public relations.

At a time when the medical profession is being attacked from other sources, it is imperative that all physicians give particular attention to the improvement of the public relations of our profession. The state committee on public relations is diligently studying the problem to determine what further efforts the state medical association should make in this regard. The fact that most of our state officials and national representatives, both Democratic and Republican alike, have been friendly to our problems, would indicate that our physicians are doing a good job. Yet I believe we can and should do better.

Cleon A. Nafe

THE CANCER PROGRAM AND THE COUNTY MEDICAL SOCIETY*

KENNETH L. OLSON, M.D.

SOUTH BEND

THE members of the county medical societies are the main factors in determining the success or failure of any medical practice program, including the cancer control projects. In order better to understand the county medical societies' place in the cancer control program, it seems best to explain the organization and projects of the American Cancer Society.

The first organization was begun by a group of doctors and lay people in the year 1913 and was called the American Society for the Control of Cancer. Then, in 1937, a Women's Field Army was organized nationally and during that year a group of women in Indiana began enlisting members for an Indiana Women's Field Army group, who started an educational program about cancer. The Indiana State Medical Association in 1938 authorized appointing a cancer committee to assist the Women's Field Army. The national organization reorganized its various groups under the title "The American Cancer Society" in the year 1944 and this is now the official name. The following year, 1945, the Indiana Cancer Society was formed, with by-laws conforming to the national organization rules, and a board of directors also was elected.

The purpose of the state cancer society is to collect and disseminate information on cancer, and, in cooperation with accredited physicians to aid in establishing, developing, equipping and maintaining hospital clinics, laboratories and other facilities. The board of directors consists of 40 members, including 11 district chairmen; 23 members are selected at large by vote of the district chairmen; the remaining 6 members are: the dean of the Indiana Medical School, the dean of the Indiana Dental School, the commissioner of health of Indiana, and the other three are the chairman and two members of the cancer control committee of the Indiana State Medical Association, as designated by the president of the state medical association.

The Board of Directors meets at least four times a year on call of the president. Any five members of a county may organize to form a chapter and apply for a charter from the state organization. In Indiana thirty out of the ninety-two counties have charters. A member is any person who contributes a dollar or more to the cancer fund. There is a district organization, made up of county chairmen, conforming to the congressional districts and this group meets once a year to elect a chairman and officers. The district chairman is automatically a member of the state cancer board. The chairman of the Cancer Control Committee of the Indiana State Medical Association serves as vice-president in charge of the service program of the American Cancer Society of the state of Indiana. A joint meeting of the cancer committee of the state medical association and representatives of the state cancer society is held once a year. The cancer committee of the state medical association gives its aid by reviewing projects in operation and recommends changes or expansion, recommends and approves new projects that conform to the general policies of the American Cancer Society, and sets up standards for clinics and information centers. The personnel of the service committee consists of one physician, a dentist, the director of the division of Public Health Nursing, the state chairman of the loan cupboard projects and the state chairman of the cancer dressing project.

The month of April each year has been designated by Congress as Cancer Month and during this period funds are raised in the United States for the American Cancer Society. The funds are distributed so that 20 per cent goes to the state organization, 40 per cent to the National Cancer Society, and the remaining 40 per cent may be retained in the county. Applications for any project in a county must be submitted on forms obtained from the state office and must be signed by the president of the county medical society or its authorized representatives and by the chairman of the county cancer unit. The money retained by the county is to be used partly for financing the next fund campaign but mainly for educational and service projects. Each county unit should have a service director and a committee to survey and administer the approved needs of the county in regard to education, facilities, personnel for diagnosis and treatment of cancer and the care of the advanced cancer patient. The county medical society should help determine the available facilities and participate in the preparation of the projects that are to be presented for approval to the county medical society in whose jurisdiction the cancer society operates. It therefore behooves each county medical society to appoint men who will organize and see to it that the projects approved by the national and state cancer societies are administered the way the

* Presented at the Secretaries' Conference, in Indianapolis, on February 15, 1948.

doctors want it done. It is important that the doctors on the committee become active and that some representative of the medical societies attend all of the county and state cancer societies' meetings. If the doctors are not satisfied with the projects then they can blame only themselves for not directing the program properly.

The objectives of the American Cancer Society with the present methods now available are early recognition of the signs and symptoms of cancer, early diagnosis, prompt adequate treatment. These objectives are expected to be achieved by means of an educational program for both laity and doctors, and by aiding doctors in the setting up of clinics and providing facilities and supplementary services where needed. The American Cancer Society thinks it can best help control cancer by four types of facilities: 1. Information service office; 2. cancer detection center; 3. cancer diagnosis clinic; 4. cancer clinic. All of these facilities can be maintained only in large cities, but in smaller cities and counties any part of the program may be used. Supplementary services may also be set up and these are: 1. transportation service; 2. dressings; 3. loan cupboards; 4. home service; 5. comfort kits; 6. terminal care.

The educational program has been accepted as being well worth-while but there has been some controversy about certain types of clinics. Most of the counties in Indiana use all of their funds for a public educational program of cancer, by means of movie films, literature, exhibit material and prominent speakers to inform the public about cancer. In some Indiana counties money is furnished to pay expenses for a speaker to talk to the medical profession. The information given out is chosen by the local chapter and should have the approval and direction of the medical society. No professional advice is given but literature about cancer is handed out and people are referred to their physician for a medical examination. If a patient has no doctor, he is sent to the local medical society for referral to a doctor. This information service is of help in getting people to see their physician early after they have discovered symptoms or signs that worry them. Information service offices are now present in seven cities in Indiana.

The clinics advocated by the American Cancer Society are three in type: 1. the cancer clinic, 2. the diagnostic clinic, 3. the detection center. The three types of clinics listed have been approved by the American College of Surgeons who have accepted the responsibility of setting up minimum standards for these clinics and of surveying and approving them. The type of clinic and the advisability of having a clinic is best determined by local conditions and desires of the local county medical society. The American Cancer Society does not own nor operate any clinic but does so indirectly by providing leadership in assisting, demonstrating, coordinating and cooperating with the medical profession in the hospitals and public health service or other health agencies dedicated to the control of cancer. The Indiana State Cancer Society Project Committee, headed by the chairman of the cancer committee of the state medical society, has encouraged the state public health department to set up a division of cancer, which has been done. A director of the cancer division was appointed last month. Part of the duties of this division is to assist in the education program and to aid in setting up clinics around the state. The setting up of this division has met with some opposition because of the potential danger of government control.

1. The cancer clinic offers full diagnostic and therapeutic facilities and can be operated only in larger hospitals and cities. The American College of Surgeons believes that this type of clinic is best held in a hospital approved by them and they recommend that the staff be a permanent one rather than a rotating system. The medical staff is made up largely of members of the hospital staff and the key specialists: a pathologist, radiologist, general surgeon and internist, plus the available service of other specialists. Besides the medical staff, there should be a secretary, social service worker and a nurse. It is recommended that conferences be held regularly and be of two types; the usual clinical sessions and the formal conference, at which special cases are to be studied. Complete records should be kept and a follow-up service maintained.

2. The diagnostic cancer clinic is a type of clinic adapted to the needs of smaller communities and hospitals where full therapeutic equipment and personnel is not available. The diagnostic clinic acts in a consultative and diagnostic capacity and recommends treatment. It should have close affiliation with a nearby, larger city, where patients may be referred for treatment. Its organization should follow as closely as possible the setup of the cancer clinic. The project committee of the cancer society is attempting to establish diagnostic clinics in the thirteen areas of the state where qualified doctors are available for operation of approved clinics. Combining two or more areas, where advisable, also is being considered.

3. The detection center is supposed to be a clinic where only well persons are examined, to distinguish it from the diagnostic and cancer clinics. The oldest clinic of this type is the Strang Tumor Clinic of New York and a report of seven and a half years' experience shows that 77 per cent of the people examined had symptoms. At the New York Memorial Hospital detection clinic, for a four year period 60 per cent of the patients had symptoms. Both of these clinics found cancer in 1.5 per cent of the well people examined. This type of clinic provides a thorough physical examination with special reference to cancer and all the patients are referred back to their family doctor with a notation of the findings sent to the

doctor. The detection center's specific plan and conduct must be formally approved by the local county medical society before it can operate. A medical advisory committee for this center must be approved by the county medical society for guidance of staff. The center must be conducted under conditions equivalent to those in hospitals approved by the American College of Surgeons. Besides the doctors, there should be a secretary, a nurse and a social worker. Doctors in some places give their services free, and at other places they are paid as agreed locally. Fees for patients are set locally and in some cities there is no charge, while others charge whatever the patient can afford and still others charge $5.00 to $10.00 or more, but no one is turned away for his inability to pay.

The detection center can take care of only a very limited number of patients in an impersonal manner so that the patient becomes of interest only as a statistical number rather than of the personal interest present when the people are examined by their family doctor. The personal physician can give a better physical examination than the detection clinic examination. The detection centers and cancer clinics can be most effective at medical schools, but unfortunately less than a third of the medical schools have any type of cancer clinics to teach medical students. The Indiana University Medical School does have cancer clinics. The detection centers for well people may develop mainly into diagnostic clinics, which has occurred at the Strang Tumor Clinic in New York, where only 23 per cent of clinic patients had no symptoms.

It is the service program of the American Cancer Society, which involves those activities which deal directly with the cancer patient or potential cancer patient, that most concerns the medical profession. There should be no interference in the relationship between the physician and his patient. Even though the cancer clinics do refer patients back to the personal physician, there is the danger that a person might believe his doctor is not competent to examine him and we must never be a party to any procedure that might lower the opinion of people in regard to their personal physician. The service program in regard to clinics must be skillfully directed so that the patients are not taken away from their personal physician and directed to a national organization, whether it be controlled by the laity or the government. If this is done the patient becomes only a piece of a pattern and he will be the one to suffer eventually. There is also the danger of this kind of setup making an inroad in changing the type of medical practice that we have in this country, which has proved to be the best in the world. We should not object to change but neither should we accept the idea that every change would improve the health of the nation. It does not seem possible that enough of the detection clinics could be staffed to examine even a substantial part of the nation; however, this can be done through the individual doctors' offices, where this examination belongs. The centers should be confined to teaching hospitals for statistical and teaching purposes.

There are certain locations of cancers in the body where it seems we will have difficulty in lowering the mortality with any present methods, and one of these is cancer of the stomach, for these patients with symptoms for three months or less have only about a 50 per cent chance of the lesion being in an operable stage. This cancer is usually silent and to discover it early would require x-ray examination of the stomach of every adult over forty about every two or three months, which is an impossiblity with our present methods. Those of us who have or will have anything to do with the cancer program must remember that the personal physician is the most important part of the cancer program and we in the county medical socities should not jeopardize his position or in any way set up projects that will make him lose interest in the cancer patient and thus dull his diagnostic acuity in regard to cancer so that there becomes more delay in the patient getting proper treatment.

Cancer programs are being operated by various methods in every state of the country. Some states are advocating detection, diagnostic and cancer clinics, and cancer divisions are being established in a small number of state public health departments. The West Virginia legislature, in 1943, passed a cancer control law with a division of cancer in the public health department. Its program is to promote education, establish tumor clinics and give financial aid to the needy. After two years' existence, no significant change in cancer statistics was noted except a slight increase in the number of cancer patients. Kansas State Medical Society, in 1946, urged each county medical society to establish cancer detection centers but no county did so. Then, in 1947, it decided that a different approach was necessary and the state medical society felt that it would be best for each doctor to become an individual detection clinic. Special physical examination forms were made and distributed to each doctor. This type of physical examination blank has a perforated portion that contains the patients' name and number and space for writing pertinent findings of the examination. Then the rest of the form, with only a number and not the patient's name, thus protecting the patient's identity, is sent to the cancer society for statistical and follow-up records. To save time, they encourage the doctor to have the patient fill in the history portion at home before he comes in for the examination. They also advocate diagnostic clinics in hospitals partly financed by cancer society funds.

In Illinois seven state-aid diagnostic clinics have been established and teams of trained consultants

at regular intervals are visiting areas that lack the services of qualified specialists. This plan has been worked out in cooperation with the public health department of the state of Illinois. Some of the states, such as New Hampshire and Kansas, have gone so far as to establish treatment centers, which we believe are unnecessary and detrimental to the private practice of medicine. Oregon has opposed the setting up of detection centers because it felt they delayed the purpose of early diagnosis by accumulating, sometimes for months, a backlog of applicants on the waiting list. Oregon and Minnesota have advocated postgraduate studies in connection with the University for the physicians throughout the state and financed by the American Cancer Society. This seems to be an excellent program and has been approved in Indiana, and one program for lay cancer workers and physicians was held at the University of Indiana.

I sent out a questionnaire asking about the cancer program in your community. Forty-four counties responded and all of these county medical societies cooperate with the cancer society where one is present. The local doctors give talks to lay groups about cancer in their community and in some cases the physicians direct the cancer society, but generally there is an indifference shown to the cancer society and help is only given when the doctors are pressed hard enough. One-third of the St. Joseph County Cancer Board members are doctors.

A few counties have reported that the local cancer society has started and instituted projects not approved by the county medical society. In Fort Wayne, for instance, the local cancer society started on a program to raise funds to build a clinic building for examination of patients but this project was finally stopped by the medical society and now the local chapter of the cancer society is following the advice of the medical society. This again brings attention to the fact that no cancer society is supposed to have a project without the approval of the county medical society, and if any project is in operation without this approval, then help in stopping the project can be obtained by contacting the state cancer society or the chairman of the cancer committee of the state medical association.

In the counties that reported to me, there are now in existence three detection centers, one located in each of these cities: New Castle, Terre Haute and Evansville. Fort Wayne Medical Society has approved the setting-up of this type of clinic but it is not in operation as yet. Two counties have a diagnostic clinic and they are located at Lafayette and Anderson. There are two complete cancer clinics in the state where diagnosis and treatment is given but they care only for indigent patients. They are located in Indianapolis, at the General Hospital and University Hospital. Nine county medical societies make a special effort to have cancer programs for the doctors. In St. Joseph County the South Bend Medical Foundation has had six cancer programs each year for the past two years and has invited the doctors of the surrounding counties to attend. The papers are prepared and given by the local doctors, with usually two or three men participating, and each taking a certain phase of the subject presented. The attendance at these meetings has been good, both from the local group and the visiting doctors. We also have a few clinic programs of cancer cases each year in each of our hospitals. We believe that these cancer programs for the doctors' benefit are an important part of the cancer educational program. We have tried to have a cancer clinic in one of our hospitals but have not found it successful. The cancer clinic was fairly well attended at first, but as time went on interest diminished and only the radiologist and pathologist attended the clinic so that it was finally given up. It is our feeling, as it is frequently stated in the literature, that the general practitioner is the most important factor in the cancer control program, since he is the one who first sees the patient who has cancer. The people must be taught the early signs and symptoms of cancer of various locations in the body so that they will see their doctor when the cancer is in an early stage of growth. Then, too, people should be taught to have periodic examinations by the physician of their choice.

CONCLUSIONS

The St. Joseph County Medical Society Cancer Control Plan, adopted April 3, 1947, is as follows:

1. The information center which was established in 1946 participates in the program by:

   a. Education of the public about cancer and the importance of periodic medical examinations. All available means are used, including placards in all the physicians' offices.

   b. Referral of patients to their own physician, or if the patient has none, then the patient chooses a doctor from the roster of physicians willing to cooperate with the plan. The roster is obtained from the St. Joseph County Medical Society. The appointment with the doctor is made by a cancer society representative.

   c. Giving to all patients who call at the cancer society office a duplicate copy of the examination blank. This blank is taken by the patient to the doctor at the time of examination. The doctor retains one copy and the second copy is sent to the cancer society office.

   d. Referral of indigent patients for examination to out-patient department of the hospital of the patient's choice.

2. Each hospital in the county is to have a cancer committee to stimulate diagnostic acuity and proper treatment, as well as to review the records of cancer patients for statistical record.

3. Each cancer patient in all the hospitals of the county is to have a cancer sheet on the hospital chart to be filled in by the doctor. The information, except for the patient's name, is available to the cancer society.
4. A cancer statistical group, composed of the cancer committee of the St. Joseph County Medical Society and three physicians selected by the cancer society medical advisors, is to be organized. This group is to study the cancer records obtained from the physicians and the hospitals for compiling statistics.
5. The St. Joseph County Medical Society is to institute a continuous educational program for stimulation of interest among its members in the diagnosis and treatment of cancer.
6. A full time record secretary is to be employed by the cancer society for the purpose of filing records from doctors and hospitals.
7. The South Bend Medical Foundation has agreed to carry out a follow-up system on all cancer patients with the consent of the attending physician.

In addition to this program, I would like to make the following suggestions:

1. Postgraduate courses should be held by individual or groups of county medical societies, with direction from the university medical school, and paid for by the cancer society of the counties or by the state cancer organization.
2. The tumor registry now in effect in Indiana should be given support.
3. A tissue diagnostic service for indigent patients should be paid for by the county cancer society.
4. Medical examination blanks should be placed in every doctor's office for his convenience when examining patients suspected of having cancer. Examination blanks should have a perforated portion containing the patient's number, name and diagnosis, so that the examination blank returned to the cancer society has only a number on it, while the patient's identity and number are kept only by his doctor.
5. Follow-up system should be maintained whereby the cancer society will contact the doctor's office to see that patients with cancer and those with suspicious lesions are checked regularly.
6. The cancer and medical societies should encourage the doctors to give complete and thorough medical examinations of their patients.

THE FEDERAL LOBBY FOR SOCIALIZED MEDICINE*

CONGRESSMAN FOREST A. HARNESS†

IT is always a satisfying and stimulating experience for me to address members of the medical profession, and I appreciate sincerely your cordial and generous reception.

I think we have a lot in common, for while you gentlemen devote yourselves unselfishly to correcting the ills of the human body, our big job in Congress today is practical therapy applied to the aches, pains and dislocations in a governmental establishment which now is costing the taxpayers forty billion dollars a year.

Our particular job, as members of the Subcommittee on Publicity and Propaganda in the Executive Agencies, is to locate and root out the cancerous tentacles of federal thought control—that system of government propaganda which presumes to tell the people what they think about certain of the grave issues in American life today, what kind of legislation they should demand as solutions, and to build up pressure groups to push their favored bills through Congress.

As you all know, of course, one important segment of this intensive propaganda activity in Washington has to do with the world-wide campaign for socialized medicine, through compulsory health insurance along the lines of the Wagner-Murray-Dingell Bills. I shall go into some of the details of the socialized medicine propaganda machine later, but first I should like to give you an over-all picture of the federal publicity operations as we have measured them to date. Remember, our investigation did not begin until last May. What I report to you today merely touches the high points of about eight months investigation of the publicity and propaganda operations of the several departments and agencies which thus far have come under the congressional microscope. There are as many more cells of propaganda yet to be dissected.

We began with a special report from the Budget Bureau which showed that in 1945 the various federal agencies spent $74,829,467 for publicity and propaganda work of every kind and description. An earlier study, covering the fiscal year 1941, showed total publicity expenditures of the federal establishment at only $28,000,000.

Now everybody in Washington recognizes that certain information services are an essential part of any institutional operation. But Congress insists that there is a clear line of distinction between legitimate information services and those

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* Presented at the Secretaries' Conference of the Indiana State Medical Association in Indianapolis, February 15, 1948.

† Chairman, House Subcommittee on Publicity and Propaganda.

additional operations which tend to build up public opinion in favor of more projects, broader programs, or federal invasion of new spheres of public service. It is primarily the latter operations which our subcommittee seeks to itemize as to cost and scope.

FEDERAL THOUGHT CONTROL

It is my contention that the people are entitled to know at least how much they are spending to educate themselves to more spending.

A quick look at the Department of Agriculture suggests the tremendous sweep and power of the government's efforts to mold and guide public opinion through federal thought control.

In the Department of Agriculture our committee investigators found 525 persons engaged in public relations work. Salaries ranged from $10,000 down to $1,888 a year. But only 204 members of this robust information staff were in Washington. The rest were found in Department of Agriculture branch offices throughout the country, and in Alaska and Puerto Rico.

Total budget estimates for Agriculture's Office of Information for the fiscal year beginning July 1, 1947, were $2,307,000, an increase of $335,350 over the previous year. But this does not include printing or mailing expenses.

Every known media of intelligence is utilized by Agriculture. The Office of Information prepared 1,998 press releases in the nine months ended April 1, 1947, an average of 11 every working day. During the same months the office prepared 837 radio scripts, including several network programs. The radio time contributed for these programs normally has a commercial value of more than $500,000 a year. The same nine months saw 17 new motion picture films released through the department's film stations.

For the 1947 fiscal year, Agriculture's combined printing bill—all bureaus, divisions and offices—was $2,260,784, exclusive of mimeographing processed within the department.

We also sent investigators into Nebraska to find out how the employees of the Department of Agriculture were generating pressure on Congress to increase appropriations, after certain reductions had been made in the department's estimates last year in the House.

In that investigation we traced letters from the official county organizations in 25 different counties. While these inciting letters were not identical, each of them did contain sentences or phrases which were based on a master telegram sent to all state agents of the AAA from Washington on the day the House reduced the appropriations.

The obvious purpose of this high-pressure campaign was to compel the Senate to restore some of the economies demanded by the House—an organized attempt by the Department of Agriculture, on a nation-wide scale, to influence the course of legislation which was at that moment before Congress.

All members of Congress are aware of the subtle and devious methods used by departments and agencies to exert pressure on members to influence votes on pending legislation. It is the opinion of our committee that it is most reprehensible when full-time employees of an agency attempt to use citizen groups to propagandize for certain legislation.

Our committee does not concern itself with merits of pending legislation. Its sole object is to ascertain and determine whether public funds are being used in dissemination of propaganda or in lobbying for or against pending legislation, in violation of law. The potentialities of the improper and illegal campaign by the Department of Agriculture can best be realized by considering the agency's size and scope. There are 3,029 county agricultural associations in the United States having county offices. There are a total of 9,087 county committeemen. There are 97,529 community committeemen, and the office personnel for these officers, in addition to the committeemen, total 8,378 man-years. For personnel a total of $19,536,824 is provided annually. Provision for travel and other expenses brings this total to $23,760,650 per year.

The responsibility for the correction of the improper and illegal use of government funds in the Production and Marketing Administration lies directly with the Department of Agriculture. Although our committee first called these violations to the attention of the Department of Agriculture in June, 1947, our best information indicates that no disciplinary action of any kind has been taken against the officials involved, and that no real steps have been taken to guard against a recurrence of such abuses in the future.

THE LOBBY FOR MILITARY TRAINING

One part of our inquiry is directed to the activities of the military services in behalf of universal military training, and that already has been the subject of a special interim report to the House of Representatives.

I shall quote some paragraphs from that report, but before doing so, I should like to emphasize that our inquiry was NOT into the merits of universal military training as a peacetime policy. Our inquiry was limited strictly and sharply to the question whether the military services were diverting part of their appropriations unlawfully to generating public opinion pressures upon Congress to force enactment of a specific piece of legislation, now pending.

The use of federal funds for the purpose of influencing legislation before Congress is unlawful under Section 201, Title 18, of the United States Code. We have, therefore, brought these matters to the attention of the Department of Justice, with a request that the Attorney General initiate proceedings to stop this unauthorized and illegal expenditure of public moneys.

One of the civilians employed by the War Department was Alan Coutts, of New York City. Mr. Coutts toured the country at the taxpayers expense, conducting radio panels and speaking to groups wherever and whenever they could be assembled. The radio panels were top-heavy with persons selected to speak for universal military training. Material supporting legislation was prepared at the War Department by Mr. Coutts, for distribution to participants in the radio discussions. Evidence before the committee reveals that on March 5, 1947, over Station WIP, in Philadelphia, Mr. Coutts asked that the listening audience write to the radio station, and that the letters received would be forwarded to proper congressional authorities.

Here was a clear case of one department diverting public funds for propaganda purposes, aimed specifically at influencing the ultimate decision of Congress on a measure in which that particular department was vitally interested.

This radio speaker was paid $25.00 a day salary, plus travel expenses and $6.00 per day for subsistence, or at the rate of approximately $10,000 a year, to go about the country beating the radio tom-toms constantly for universal military training.

It is not the contention of our subcommittee, of course, that the War Department has not the right to state the case for its program, whatever that program may be—whether rivers and harbors, universal military training, chemical warfare, or whatever. But we do insist that the Army is authorized by law only to present its case to the appropriate committees of the House and Senate. It has no authority to divert part of its appropriations to propaganda to bring pressure to bear on Congress.

There were other instances of such employment in the War Department of persons engaged exclusively in the work of generating pressure on Congress for enactment of universal military training.

Our committee report on this phase of the inquiry also determined that government propaganda almost uniformly is designed to make the individual feel that he is thinking for himself. On this point our report carried this challenging observation:

"In reality, government propaganda distorts facts with such authority that the person becomes prejudiced or biased in the direction which the government propagandists wish to lead national thinking."

Our investigation established that the Army used not only these paid speakers and paid radio debaters to build up a demand on Congress for universal military training, but also that a special motion picture was made for free release to any theater which would show it. This film cost about $36,000 to produce, and an additional $14,000 was spent to distribute it throughout the country.

The Army likewise used military airplanes to carry several hundred civilians to and from Fort Knox, Kentucky, to view the experimental training project there, which was to serve as the pattern for universal military training.

PUBLIC HOUSING PROPAGANDA

Another phase of the inquiry reached to the Federal Public Housing Authority in California, which had been charged in the San Diego area with using public funds for partisan political activities.

Several days before the election of 1946 political posters appeared in prominent places throughout every housing project in the San Diego area, particularly at bus stops and especially in front of management offices. These posters were captioned "SAVE YOUR HOME" and contained alleged statements of certain candidates which were unfavorable to the public housing groups. Statements were made as direct quotes, and investigation proves the quotations were inaccurate.

All housing tenants have the first five days of each month to pay their rent, and approximately 78 per cent of the tenants do so on the fifth day, which was the day before the federal election. Signs were placed prominently around the management offices, with the obvious intent to impress the tenants when paying their rents. Such posters were not only improper government propaganda, but a violation of the Civil Service regulations which prohibit political activities by federal employees.

Much of the publicity and propaganda relating to the Public Housing Authority emanates through an organization known as the National Association of Housing Officials. This Association has been very active throughout the country and most of the officials and employees in the Public Housing Authority are also members of the association.

This organization has further been used for propaganda purposes in furthering of the Taft-Ellender-Wagner National Housing Commission Bill. Federal employees have also used the association to foster and promote state legislation, the purpose of which is to carry on in the public housing field after the Federal Government has ceased to function in that activity at the conclusion of wartime emergency.

We are continuing our investigation as it relates to publicity and propaganda within the Public Housing Administration, and shall submit a detailed report to Congress in the near future on this special aspect of federal propaganda.

WAGNER-MURRAY-DINGELL BILL

There are several other important segments of government propaganda now under preliminary investigation by our subcommittee. But I shall not go into detail here, for I know that this audience is interested particularly in our investigation of the well organized campaign being carried on by the Social Security Board to impose a nation-wide scheme of socialized medicine upon the United States, through the compulsory health insurance program embodied in the Wagner-Murray-Dingell Bill. This inquiry has been perhaps the most sig-

nificant and revealing phase of our subcommittee's work to date.

It is an historical fact that wherever some form of dictatorship prevails in government, there we also find some manifestation of socialized medicine.

The brand of dictatorship makes no difference—Communism, Fascism, Nazism, Socialism—all are alike, in that they enforce a system of state medicine, or political medicine, as I prefer to call it.

Whatever the name of the dictatorship, or whatever the pattern of the particular brand of collectivism in a given country, the system of socialized medicine is always pretty much the same. It is based on compulsion, and is generally administered by a nation-wide system of ward and precinct politics.

If the medical profession and all our hospitals can be taken over by the federal government and forged into a new and gigantic health bureaucracy, then it would only be a question of time until Washington likewise moved into the field of education, religion, the press, the radio.

Freedom soon would be in total eclipse.

That must not come to pass in mighty America, the last great citadel of freedom and liberty on the face of the globe today.

Ours is a great responsibility to hold aloft the bright torch of freedom and honest representative government. And it has been most encouraging to know that we have the great body of the American medical profession standing behind us in this effort in Congress.

Approximately ten months have passed since our special subcommittee was established. More than six solid weeks of our investigation have been devoted exclusively to the so-called Health Work Shops set up throughout the country under the aegis of the U. S. Public Health Service, the Social Security Board, the Children's Bureau and several other agencies having an oar in the administration of health and welfare programs.

The amazing ramifications of the federal propaganda in behalf of socialized medicine have astonished me. How much of our total appropriations for health and welfare are being diverted to this sort of high pressure propaganda we do not yet know. But we do know that the amount is considerable. And before our inquiries are concluded, we shall hope to present for public consideration an itemized account of the total diversion of federal funds for this propaganda campaign. In that accounting we shall include a considerable item for foreign travel to New Zealand, England, South America and Japan, for we now know that our health bureaucrats are interested in socialized medicine not only in the United States but in every other land in which they can find an opening.

HEALTH WORK SHOPS SET UP

We now know that the Social Security Board has been spending about $2,000,000 a year in public relations activities—regardless of whether we call it publicity or propaganda. We do not yet know the full scope of this work. But we do know that they have been setting up these so-called Health Work Shops; that they were launched on a nation-wide scale; that they are financed entirely by federal funds diverted from the regular appropriations, and that it was never at any time the intention of Congress or its Appropriations Committees to authorize the expenditure of public funds for such activities.

To our committee it seemed reasonable to ask why these agencies should be permitted to spend public money to generate an entirely artificial public demand for a system of socialized medicine in the United States, when all our experience through public opinion polls, and all our contacts with the medical profession insist upon maintenance of our traditionally unfettered profession, under which we have attained the highest standards of service and scientific skill and proficiency ever recorded in the history of the world.

It seems to our committee to be a proper function of the Congress to determine whether the diversion of public funds from legitimate purposes to purely propaganda purposes for socialized medicine does not, in fact, constitute a criminal violation of the law.

And on this point I may say that the Federal Bureau of Investigation is giving that question some serious study at the moment. As you know, we advised the Attorney General, Mr. Clark, what we discovered about the Health Work Shops, and we have since been informed that some of the vouchers are in the hands of the FBI for investigation.

All this federally-financed activity for socialized medicine heads up in the Bureau of Research and Statistics in the Social Security Board. Our committee investigators have found in that bureau a veritable nerve center of socialized medicine propaganda for the entire world.

Mr. Isadore S. Falk is the Director of Research and Statistics in the Social Security Board. He has been in the government service for some twelve years. He has always been noted for his militant and aggressive advocacy of compulsory health insurance, commonly known as socialized medicine.

Our committee, of course, does not challenge the right of any citizen to hold whatever views he may wish on any subject of political or economic policy. But we are interested that funds appropriated by Congress for public administration shall not be diverted to a world-wide system of propaganda calculated to advance socialized medicine the world around. Such operations, until specifically approved by the Congress, are positively illegal. And our committee will not rest until they are uprooted and stamped out of the federal picture.

Any group of citizens has a right to agitate for socialized medicine, if it puts up its own

money and pays its own bills. But I, for one, do not intend to see this gigantic propaganda machine for socialized medicine financed entirely by funds secretly diverted from moneys appropriated by Congress for the legitimate functions of government.

In our hearings to date we have examined officers of the U. S. Public Health Service; the Children's Bureau (which is another section of the Federal Security Administration); the Social Security Board, and the Farmers Home Administration, a section of the Department of Agriculture. As a part of this investigation, we also called upon the General Accounting Office for certain travel vouchers in connection with the Health Work Shops.

We found that the first meeting on the Health Work Shops was held in Washington on November 2, 1945. It was attended by only twelve persons—ten of whom were full-time employees of the Public Health Service, the Social Security Board and the Department of Agriculture. This is where the Health Work Shops were born. The chairman of that meeting was Dr. George Perrott of the U. S. Public Health Service.

The detailed operations of the Health Work Shops are set forth in House Report No. 786 of the 80th Congress, as published by our subcommittee on July 2, 1947.

Suffice it to say here that the project was financed almost entirely by federal funds, through the contributions of the participating government agencies—through the assignment of the so-called forum experts from the government bureaus, through the payment of travel expenses, and the providing of literature and mimeographed material for the meetings.

The real purpose of these meetings was to generate pressure upon Congress for passage of the Wagner-Murray-Dingell Bill.

HEALTH MISSION TO TOKYO

Plowing deep into these matters, our investigators soon came upon the much-discussed Health Mission to Tokyo. You have seen reports on this in the newspapers. It, too, is revealing for the light it throws on the operations of the Washington inner-circle which is forever pulling the wires for socialized medicine.

In our examination of the Bureau of Research and Statistics in the Social Security Board, we discovered that practically every argument, every pamphlet, every radio broadcast, and every statistical table advocating socialized medicine originated primarily in the Social Security Board. Here is the world-wide nerve center of the movement for socialized medicine.

Our committee found, and has so reported to Congress, that pamphlets prepared as to basic material in the Social Security Board were distributed to the general public by the CIO, the AFL, the Farmers' Union, the Physicians' Forum and the Committee for the Nation's Health. All these pamphlets vigorously supported socialized medicine as embodied in the Wagner-Murray-Dingell Bill. In several of the pamphlets, no matter by whom distributed, the language and the figures were the same.

The Social Security Board is the central generating plant, so to speak, and the material is then distributed for popular consumption by whatever organization will lend its official imprint to arguments and briefs of Messrs. Isadore Falk and Wilbur Cohen. That's the fundamental set-up discovered by our committee, and that's the beginning of the Health Mission to Tokyo.

In August, 1946, a federal civilian employee from Washington (one Stanchfield) who had been detached temporarily from his job in Washington, moved from Korea to Japan, to make a preliminary survey of social security and health needs. Upon his return to Washington early in 1947, Mr. Stanchfield proposed a general health mission to Tokyo. His proposal was presented directly to Mr. Arthur J. Altmeyer, Commissioner of Social Security, not to the War Department.

Next, on March 5, 1947, Mr. Altmeyer outlined the mission in a formal communication to the War Department. In that letter Mr. Altmeyer designated the particular individuals who should make up the mission, and then went further to suggest that William H. Wandel, Chief of the Program Division, Bureau of Unemployment Security, be appointed chief of the Social Insurance Division of the Public Health and Welfare Section of the Supreme Command for the Allied Powers in Tokyo. It is perfectly apparent from the letters we have taken from the War Department files that the personnel of this mission and the planning of its program originated in and was dictated from the Social Security Board in Washington.

Up to this point there had been no hint that the proposed Health Mission had been requested or urged either by General MacArthur or any responsible Japanese source. The suggestion came first from Mr. Stanchfield, who had been sent to Tokyo for that particular purpose.

Next we found a letter, under date of June 14, 1947, from Mr. Wandel in Tokyo reporting directly to Mr. Falk in Washington on the progress of the work in Tokyo. In one revealing passage of this letter, Mr. Wandel said:

> "We think that our need is for someone who is primarily not so much an economic analyst as one versed in health insurance. Health insurance is the major field of social security in Japan. . . . Permanent revision requires amalgamating National Health Insurance with Health Insurance on a compulsory basis."

When the Tokyo Health Mission finally was named, it comprised two men from the Public Health Service, one from Mr. Falk's bureau, and

one from the Federal Housing Authority. This mission departed for Japan on August 28, 1947, with the understanding that Mr. Altmeyer and possibly Mr. Falk would follow when the work had been sufficiently organized in Tokyo.

One of the members selected for the Tokyo Mission was Dr. B. M. Davis, who is the son of Mr. Michael M. Davis, chairman of the Executive Committee of the Committee for the Nation's Health. This Committee for the Nation's Health is perhaps the most conspicuous lay organization agitating for socialized medicine in the United States. The father, Mr. Michael M. Davis, long has been a co-worker with Messrs. Altmeyer, Falk and Cohen in the national and international agitation for socialized medicine.

It is significant, also, that the son, Dr. B. M. Davis, was, at the time of his selection for the Tokyo Mission, on duty in England, temporarily detached from his government job in Washington, to assist in perfecting legislation in England for the complete socialization of all hospital and medical care in that country.

We thus find Dr. Davis barely finishing his assignment in England in time to catch the Tokyo assignment.

It is true that Dr. Davis is a member of the staff of the U. S. Public Health Service. He is a government employee of the United States, but the record shows that during the past 18 months his principal duty has been in perfecting medical legislation in other nations—first in England and next as a member of the Mission to Tokyo. After a brief stay in Tokyo, he returned to England to assist on the final phases of the British program in Parliament.

Because this instance offers a shocking demonstration of bureaucratic intrigue in violation of the purposes and intent of Congress, I brought the matter to the attention of the House Appropriations Committee, with the suggestion that when the next budget comes up from the Social Security Board and the Public Health Service, funds for all those engaged in spreading socialized medicine around the world be stricken from the Appropriations Bill unless, of course, Congress shall determine to support such world propaganda with funds specifically allocated for that purpose.

In my letter to Chairman Taber of the Appropriations Committee, I made eight specific charges against the Tokyo Health Mission. I wish to summarize them here, because they are the nub of our case against the Social Security Board and the U. S. Public Health Service in relation to all this propaganda supporting socialized medicine.

My charges against the Tokyo Health Mission are as follows:

(1) That the health mission to Japan was composed entirely and exclusively of men long identified in the public record as advocates and proponents of socialized medicine, not only in the United States but throughout the world.

(2) That the real purpose of this mission is to lay the groundwork for a system of socialized medicine in Japan.

(3) That the scheme for such a mission originated in the Division of Research and Statistics in the Social Security Board in Washington, and nowhere else.

(4) That the nominal request for the mission was engineered through the General Headquarters of the Supreme Commander in Tokyo by federal employees sent from Washington for that particular purpose.

(5) That General Douglas MacArthur does not favor—and does not approve—any plan to establish compulsory socialized medicine in Japan.

(6) That the dispatch of this mission to Tokyo for the purpose indicated in Mr. Wandel's letter to Mr. Falk under date of June 14, 1947, is a gross misuse of public funds.

(7) That the real purpose of the mission was not to assist Japan in working out her basic problems in health and welfare, but to force upon that country a compulsory system of socialized medicine.

(8) That although the questions here involved are of a health and medical nature, the Surgeon General of the United States Army was not consulted in reference to the problems involved.

It is a matter of public knowledge that the Health Mission to Tokyo has now returned to the United States. They came back, be it noted, before Messrs. Altmeyer, Falk or Cohen joined them in Japan.

We are assured from certain events in the public record, that our subcommittee's letter to the House Appropriations Committee, under date of September 9, 1947, had a decisive influence upon the course and actions of the Tokyo Health Mission. Once the full light of public inquiry and understanding had been focused upon the mission, it soon became a different sort of thing.

RECOMMENDATIONS SUBMITTED TO A.M.A.

You will be happy to know that General MacArthur has not acted on the recommendations submitted by this mission, but has referred them to the American Medical Association in Chicago for consideration and advice.

I wish that I were free to give you at this time the details of the communications that have passed between myself and General MacArthur on this transaction. I cannot properly do so, however, until the final report of our subcommittee. Suffice it to say here that General MacArthur refused to act on any of the mission's recommendations until they had been weighed and evaluated by the American Medical Association.

I deem it inappropriate for federal employees, at the expense of the American taxpayer, to travel throughout the world preparing or assisting in the

preparation of legislation to be adopted by foreign countries when similar legislation, long pending, has not been approved by the Congress of the United States.

But the issue is even broader than the question of socialized medicine. It is also challenging in that it reveals for public examination the manner in which all government lobbyists operate on the government payroll, how they are always at work to expand their fields of interest, to perpetuate themselves in office, and to impose their ideas and systems upon the American people by organized propaganda paid for entirely by the diversion of public funds from their true purposes to the shielded purposes of the top bureaucrats and planners.

This is the fundamental issue from the legislative standpoint—the question whether the Congress of the United States has lost its power to establish and maintain the sort of government the people want; or whether the bureaucrats are supreme and can give the sort of government they want, regardless of Congress, regardless of elections, regardless of public opinion.

That's a question that goes to the very roots of popular government. If the bureaucrats are above Congress, and may defy Congress in the way they spend their appropriations, then representative government has become a fiction.

I am certain that the United States has not yet reached the point where it must be submissive to the dictates of a rampant bureaucracy in Washington.

Our assignment is a challenging one, for it is often very difficult to separate the merits of pending legislation from the larger question of government propaganda designed to provide a system of national thought control.

But we have set our course resolutely against the whole system and theory of government-made public opinion, and we have attempted conscientiously and fairly to distinguish that great issue from all subsidiary questions touching the merits of specific legislative proposals. As we have stated in our several interim reports, our inquiry is not directed to the merits of this program or that, but solely to the question of whether the federal agencies are engaged in generating public opinion for or against pending legislation. Such activity by the federal agencies, whether for or against any particular piece of legislation, is clearly beyond the law. And that is the beginning and end of our inquiry—whether the government agencies are in fact making the public opinion which comes back upon Congress in the form of pressure-group activities.

Every one in Congress is keenly conscious of the tremendous, unmeasurable power of this government propaganda machine, for he comes in direct personal contact with it every day. He lives with the lobbies, good and bad, which constantly seek to influence the course of legislation, and he can hardly fail to know that the most powerful, most persistent of them all is the federal lobby. It works around the clock, every day of the year.

THREAT TO FREE GOVERNMENT

I wonder how many among us actually realize the nature and extent of this threat to free representative government!

The first instinct of bureaucracy is self-preservation. The second is expansion. Like any living organism, an administrative agency, once launched, seeks constantly to justify its existence—to perpetuate itself and to expand. In the salubrious climate of government paternalism which has prevailed under this and the preceding administration, our Washington bureaucracy has luxuriated into a tropical jungle. It has grown to the alarming extent that it touches and shadows the daily life and daily thinking of every citizen.

Now that we have a majority in Congress determined not merely to halt this bureaucratic growth, but to clear away the propaganda jungle which enmeshes us, the American people begin to see the true nature of Big Government.

Whether the immediate purpose of government propaganda is good or bad, the fact remains that individual liberty and free institutions cannot long survive when the vast power of government can be marshalled against the people to perpetuate a given policy or a particular group of officeholders. Nor can freedom survive if all government policies and programs are sustained by overwhelming government propaganda.

The limited work our committee has done in the short time since its establishment last May convinces me that it can render a vital service.

Congress cannot, of course, remedy at once all the serious abuses which we are able to expose; for enforcement of the law is solely the responsibility of the executive. I hope, however, that we shall have the united support of the American people in our intention to bring this grave danger to the attention of Congress and the President.

Thought control is a device of dictatorship. It has no place in free America!

QUANTITATIVE SEROLOGY AND SYPHILIS*

Part II—The Role of Quantitative Serologic Tests In the Diagnosis of Syphilis

Carl C. Kuehn, M.D.

Samuel R. Damon, Ph.D.

INDIANAPOLIS

Part I of this discussion dealt with the difference between a qualitative and quantitative serologic test for syphilis, and pointed out the fact that since a blood specimen sent to a serological laboratory is routinely put to a qualitative test only, it is necessary to request quantitation specifically when it is desired. Now the question to be considered is: When is quantitation indicated; that is: under what circumstances is one justified in requesting it? In answer to this it must be emphasized first of all that quantitation should be done *only* on specimens that give a "positive" result in the qualitative test and is of no value on individual specimens in the routine examination of patients on whom the diagnosis of syphilis has not yet been established. In other words, the level of positivity of an individual specimen has in itself no *diagnostic* significance since it has been found that sera giving *false positive* reactions some times attain rather *high titers.*

There are times, however, when quantitation may be necessary in order to *help establish a diagnosis.* Such would be the case, for example, in suspected congenital syphilis. An infant born of a syphilitic parent, but without clinical manifestations of congenital syphilis, can not be definitely diagnosed as syphilitic unless more clear-cut evidence can be obtained. In such an instance, one must depend almost entirely upon the serologic picture or pattern. The serologic pattern is determined by obtaining a *series* of test results, qualitative and quantitative, at about two week intervals for a matter of three or four months, establishing as a base line the quantitative result on a blood specimen drawn at birth. In these tests, a rising or sustained high titer can be considered as diagnostic for syphilis, whereas a more or less steady decline in titer or even a "negative" test in a matter of three or four months would indicate that the reaction obtained at birth had been false.

A series of quantitative tests may also be indicated in other cases of suspected false positive reactors though in general it may be stated that in absence of antiluetic treatment a positive routine or qualitative serologic test for syphilis, persisting for a period of three months, as evidenced by repeated blood tests, can be considered as serologically diagnostic.

Suspicion of false positive tests may be indicated whenever:

1. The reaction is doubtful or weak.
2. There is a conflict between the findings in complement fixation and flocculation tests (providing the patient has not had previous antisyphilitic therapy).
3. The reaction is fluctuant.
4. There is a reversal to "negative" in from one to three months.
5. The reaction remains persistently low, i.e. "doubtful."
6. There is clinical or anamnestic evidence of definite character.

In any case, before a quantitative serologic test is requested, this should be preceded by a complete physical examination; a searching interrogation of the patient with regard to lesions; and a further questioning relative to recent immunizations or illness which may be responsible for false positive reports obtained in routine qualitative serologic tests for syphilis. Except as an aid in determining false positive serologies, quantitation is of little value as a diagnostic aid in other acquired syphilis.

After it is definitely established clinically and/or with the evidence of repeated positive qualitative tests that the patient does have syphilis, it is frequently of great value to the clinician to know the serum titer. This, of course, can be determined only by quantitative tests; and such tests are especially valuable when it is desired to follow the serologic response to one of the short, intensive schemes of treatment. One circumstance in which quantitation would be of great value from the very inception of syphilitic infection, would be in the case of syphilis in pregnancy. As in all cases in which the presence of syphilis is certain, the routine blood test will not necessarily give significant information with regard to the serologic response of the patient to antiluetic treatment. Though routine blood tests may remain "positive" for many months after intensive therapy (e.g. 8-10 day penicillin schedule) the level of positivity may actually be changing, and in the case of pregnancy it is important to know what is happening to this level of positivity between the last date of treatment and the expected date of delivery. Only a *series* of *quantitative tests* can give this information. The initial quantitative test (before treatment) establishes the base line, and should the titer be declining during the last months of preg-

* This is the second in a series of three articles on Serology in Syphilis appearing in three consecutive issues of The Journal.

nancy, then all is well. However, should the titer remain persistently high, or should it rise significantly, re-treatment should be instituted immediately as a safeguard to the fetus.

In requesting quantitation, it is advisable to obtain it only from an approved laboratory, *always* the same laboratory, and *always* by the same technic, in order to eliminate discrepancies that may occur when two or more technics, with their inherent variables, are employed. The State Board of Health laboratory quantitates by the Mazzini method, whereas many other laboratories in the state quantitate by the Kahn or some other method. The results obtained on a given specimen may not be clinically comparable and although expressed in terms of "units" in the various methods, the values may be totally different, and thus appear to be discrepant. In fact, even individual technics are open to such variations in methods—in different hands—that varied reports may result if titers obtained by any one given test are issued by more than one laboratory.

Comment: A single quantitative serologic test for syphilis is of little or no value except as a laboratory report, indicating how positive a serum may be at that time in *one* laboratory, using *one technic* and merely serves to burden the laboratory with unwarranted work. However, a *series* of these tests performed over a period of several weeks at about two or four week intervals, using the same testing technics and the same laboratory, will establish a serologic pattern of clinical significance, both in diagnostic and posttreatment follow-up studies of a syphilitic patient.

SUMMARY

1. Routine diagnostic serologic tests for syphilis are qualitative and not quantitative examinations.
2. The significance of the quantitative serologic test for syphilis can not be determined on the basis of a single test specimen. Whether the examination is requested as a diagnostic aid or a posttreatment serologic follow-up procedure, a single test is significant only as one component of a serologic pattern in either instance.
3. Serologic patterns as established by quantitation are not truly comparable, unless the component tests are made in the same laboratory employing the same testing technic.
4. In general it can be stated that in absence of antiluetic treatment a rising titer, or a sustained high titer, is serologically diagnostic of syphilis—whereas a low titer, and especially one which declines over a period of several weeks, is evidence against the presence of syphilis.

NURSES—COMMUNITY SAFEGUARDS

Mary Lou Evans, R.N.

PUTNAM COUNTY PUBLIC HEALTH NURSE

WHILE making routine morning rounds, Doctor Smith encountered Doctor Jones in the County Hospital. As usual, they were pressed for time, but stopped long enough to exchange "hellos."

"If you'll have seen all your patients within fifteen minutes I'll join you down in the lounge," said one to the other.

So each physician went his way, one to the nurse station to write orders and the other to see his two patients on this wing. Doctor Jones was the first to reach the lounge. He hurriedly lit a cigarette and sat thinking over what he'd accomplished so far this day and all he hoped to crowd into the afternoon and evening.

"What's new, Joe?" asked Doctor Smith as he came into the doctor's room.

"Not much—John and Jane Doe left for Miami yesterday. What's new with you and your family?"

"Everyone's fine except Jimmy. He has measles."

"By the way, I heard that the County Commissioners appointed a public health nurse yesterday. What do you suppose Middleville and Middle County want with her? I should think they could spend the taxpayers money in better ways. We need nurses in our hospitals. Why doesn't she come out here to work?"

"Wait a minute, Joe. Sounds as if you resent the idea of a public health nurse coming here."

Doctor Jones leaned forward and began, "Sam, you were in the Army and I've heard you say more than once that you were more than glad to leave it behind you and get back into private practice. Do you realize that public health could mean Army routine? I'll bet that within six months this public health nurse will try to have us all so organized we won't know whether we're coming or going."

At this point in the conversation Dr. William Miller entered the room. Just two months ago he had been appointed as County Health Officer. Hearing the words "public health nurse" he immediately entered into the discussion. Doctor Jones was the first to address Doctor Miller.

"Sit down, Bill. Let's hear your opinion of the newly-hired public health nurse."

"Well, Joe, I'm convinced that we are fortunate in having her in Middle County. She graduated from nurses training three years ago and since

has been in an accredited school of public health, taking special courses in the art of keeping people well. Seems to me that we'll have plenty of problems to keep her busy.

"All doctors know that a big part of their job is teaching people to keep well. Often we don't see people until they are seriously ill. When we work long hours with patients who must have operations or other major treatments to save their lives, we are not likely to look for the family who needs instruction about the proper foods to eat."

Sam Smith, who had been silent for a few minutes, spoke, "My only experience with visiting nurses was during my internship. Community Hospital had an outdoor obstetrics service. We performed home deliveries and the nurses from the Visiting Nurse Association came into the homes an hour or so each day and supervised the care of the mother and infant. They called us when any complications occurred."

"Few of us here in Middle County have home deliveries any more. What else comes under public health?" asked Doctor Jones.

The Health Officer said, "I think I can answer that for you by asking you a question. Joe, how many patients do you have who have tuberculosis and refuse hospitalization? How many tuberculosis contacts do you know of who haven't had x-rays or tuberculin tests? Every physician in this county has at least one such case. If you would spend your time educating these persons in safeguarding themselves and others you would have no time for surgery or anything else."

Sam Smith's face showed interest. "Bill, I think you've got something there. Even as you spoke several cases needing special health education came to mind. There's Mrs. James, a paralytic, who has no one to care for her except her aged mother. She knows little about the importance of good back care and turning her daughter frequently. I wonder if our new nurse wouldn't come in handy there."

"I get the idea," said Doctor Jones. "Maybe a public health nurse is just the person we need to follow up on venereal disease contacts and teach them the importance of early treatment."

Doctor Miller spoke again, "Yes, and I can think of many other ways a public health nurse can help us and this community. She will visit the schools and act as a health consultant to teachers. She can answer the many questions of prenatal patients that will help them to understand their pregnancies."

Doctor Smith said, "Let's not rush her, boys. She hasn't even started to work and we already have her snowed under. Maybe she has a few ideas of her own to incorporate."

"I'm sure I'm safe in saying that if our Medical Society cooperates with the public health nurse, she will do the same with us. She won't visit any of our patients without our permission. Also, I'm confident that she will not do anything without the go-sign from us." This came from Doctor Miller.

"Well, boys, you've given me a somewhat different idea of public health. I guess I just didn't know what it was all about. Let's invite the new public health nurse to attend our next medical society meeting. With her we should be able to establish some policies that will help the community to have a better health status," said Doctor Jones.

"That's a fine idea, Joe. Maybe a couple of us could act as a 'Welcome to Middleville' committee and visit her in her office when she begins her work the first of the month."

With this the three physicians walked out of the lounge. Each had his own mental plan of how he could help the public health nurse help the community.

APRIL 11-17 IS BEING OBSERVED AS NATIONAL PUBLIC HEALTH NURSING WEEK THIS YEAR.

U. S. PUBLIC HEALTH SERVICE REPORT ON INFLUENZA

This season the highest incidence of influenza was reported principally in the states in southern areas. Where identified, it was due to type A influenza virus. Gastro-intestinal symptoms were present in practically all areas, and in most localities both upper respiratory and gastro-intestinal symptoms were reported. In Los Angeles, where the occurrence of epidemic incidence was first reported, there were three separate clinical syndromes—acute rhinopharyngitis, typical influenza-like illness, characterized by severe backache, headache, and generalized muscle aching and tenderness, and gastro-intestinal symptoms, with nausea, vomiting, diarrhea, and, at times, central nervous system irritation. For lack of better identification, the disease was early reported as due to "Virus X." Later, type A influenza virus was identified. An outbreak in a small locality in Texas resulted in 6 deaths in children under 2 years of age and 1 death in a child aged 6. Encapsulated type B Hemophilus influenzae organisms were demonstrated in throat cultures from 3 children ill with laryngotracheobronchitis.

I. Q.

M. F. Daubenheyer, M.D.

INDIANAPOLIS

(Editor's Note: Dr. Daubenheyer, in sending us this article, wrote: "It is not, in the true sense, a scientific paper; more sarcastic and indirectly a back-handed slap on those who thoughtlessly place patients in the wrong stall. It might wake them up." It is quite likely that some will be "waked up" a bit by this discussion. However, in our opinion, such comments as these create interest and a created interest commonly results in much good.)

BACK in the Gay Nineties, at the age of 18 I grew a mustache, donned a swallow-tailed coat and began earning my living as a school teacher in a little, red brick, country school house. The first day of school was an important event in my life, as I rang the school bell that morning and watched forty-odd urchins, ranging in age from six to nineteen, come trooping in and selecting seats. Of all that group two stand out preëminently in my memory.

One was Charley, a boy about 10 years old. Charley came from a poor family who lived in a small, four room, country home, the floors bare, a few rickety chairs, an old cook stove, and none too many bed clothes. Strive as best I could, poor Charley could not learn. He could not spell. Give him a word to spell and he would keep naming letters until he was stopped. Ragged, unkempt, he could not learn, but could work. He would chop wood, shuck corn and do chores before school in the morning and after school in the evening.

If Charley had lived and attended school in 1948 the social workers, welfare department and psychologists would surely have taken him, had him committed to a state institution for mentally retarded, and by the time he had reached manhood he would have been thoroughly institutionalized, and in all probability spent the rest of his natural life an inmate. Fortunately for Charley, his childhood was during the Gay Nineties when social workers and welfare departments were unknown.

The other pupil to whom I referred was Hugh. Hugh was about the same age as Charley. Hugh came to school dressed like he had stepped out of a bandbox, hair combed, hands and face clean, shoes polished. Hugh was brilliant. He could attend the spelling bees and spell with the larger boys and girls. He could name the presidents, the states and their capitals; in fact, though a ten-year-old, he was informed on geography, history, news, and about everything. He was a "whiz-bang," one who would make the social worker and psychologist swell with pride. He was a Quiz Kid, but there being no radios or quiz programs during the Gay Nineties he, too, was born fifty years too soon to show off on a quiz program; he had to exhibit at the spelling bee and school entertainments.

Years later I accidentally met the "dumbbell," the mentally-retarded boy, the one who could not learn. He was living in one of the rich farm counties of the state, a prosperous farmer; owned a good farm, herd of cattle, drove of hogs, modern farm machinery and, above all, had a son at the university. Charley left home at the age of 15, went to a good farming district and got a job as a farm hand; saved his money, later bought a small farm, in time paid for it and then bought more land, married and became one of the prosperous farmers of the community.

Hugh finally quit school and started to work as a clerk in a store. He soon was out. Then he became a telegrapher and worked as an operator a short time. Other jobs followed, and finally he died in a state institution.

The above is related to prove the truth of the adage, "You can't tell the luck of a lousy calf." Also, that too much dependence can not be placed on the I. Q.

We are living in a fast age, an alphabetical age. To shorten and hasten, initial letters are used instead of the complete word; so I. Q. are for the words Intelligence Quotient.

I. Q., or Intelligence Quotient, refers to the level of intelligence of a person. The level is above or below 100, which is regarded as normal. It is obtained by one of supposed superior intelligence using a system now in vogue to determine the level of intelligence of the one being examined. In many ways the intelligence test is a valuable adjunct to the psychiatrist, also to the teacher.

However, the human mind cannot be explored and measured accurately as the engineer would measure distance or the scientist the weight of a foreign body. The one examined might not co-operate—again might be embarrassed or for other reasons fail to answer the questions promptly. The intelligence test cannot determine integrity, loyalty, honesty, whether industrious or not, reliability and other qualities which determine personality.

I understand the British depend more on the person's ability to make a social and economic adjustment than the intelligence level obtained. One with a low I. Q. might be honest, considerate, industrious, reliable, loyal, and make a social and economic adjustment. This to my mind is far more sensible and practical than depending on the I. Q.

Then, too, there are those who have become demented—dementia praecox, the enigma of the medical profession, a mental condition which occurs as a rule in early life, in which there is deterioration of the mental facilities. Such an afflicted one, on being given a mental test, will exhibit a low

I. Q. Depending on the I. Q., such a one is committed to a school for the mentally retarded.

I was connected with such a state school. We had more than fifty insane patients. The school was not equipped, nor was the personnel trained to care for or treat them. They should have received occupational therapy and other treatment which they did not receive; an injustice to the patient, a handicap to the school.

For example, a young married woman became listless, lost interest in her home and loved ones, developed delusions that she was an opera singer; had various hallucinations, her mental facilities deteriorated, demented to a low I. Q.; committed to that school, a case of dementia praecox. She was kept in a side room.

Another patient, sixty-odd years old, developed delusions of persecution, suicidal, homicidal, demented to such an extent that his mental faculties were greatly deteriorated, a low I. Q., committed to that school. He was violent at times, a raving maniac, and straight jacket was necessary.

Depending on I. Q., the school was being loaded with demented and insane patients. Too much emphasis on I. Q. It is definitely overworked.

Nitwits and "Simple Simons" were as common during the Gay Nineties as in the present time. A psychiatric examination was unknown, also not required to prove such a one as feebleminded. Everyone recognized the mental condition, it was obvious.

The term schizophrenia had not yet been invented. The demented were known as insane or commonly called crazy. A person beset with delusions of persecution or other fixed or fleeting delusions, hearing voices, arguing with imaginary persons, homicidal, suicidal, and at times a raving maniac, was recognized by all as insane. If it had been suggested at that time that such a one should be sent to a school for mentally-retarded children, the person making such a suggestion would have been regarded as loony as the crazy one. (That is, back in the Gay Nineties.)

The change in social life, manner of living and government, from the Gay Nineties to the present time is so great that the Gay Nineties might have existed centuries ago instead of only a few short years.

Insidiously, rapidly, our government has and is undergoing a change and becoming a national Socialistic Government. Not only is the government now regulating and controlling the lives of the feebleminded, but every business and every citizen, to a greater or lesser extent, is beginning to feel the government hand of regimentation and regulation.

The facts are:

I. Q. is only a symbol of the time.
A hand pointing the way, a sign,
Toward the goal, the how and the way
To which we will arrive, some day.

On that day, Bureaus in Washington, too,
Will be telling everyone what to do;
The farmers when to sow and when to reap,
The rest of us all, what and when to eat.

Doctors prorated and punching a clock,
Receive orders and medicinal stock,
From a central bureau which has the say
As to treatment of patients, day by day.

Blushing brides advised about sex and life,
Politely informed on duties of wife,
Number of children allotted to her,
The manner, way and when they shall occur.

Obsolete is the good old fashioned way
Of conception, in the Nineties, so gay;
In lover's embrace, with many a kiss,
No thought of babes, supreme, erotic bliss.

Then Red, Red Russia will turn red with shame,
When U. S. A., Democracy in name,
Bureaus, with thousand dictators, then some,
While poor, Red, Red Russia has only one.

CITE FATAL CASE OF DDT POISONING

A case of fatal poisoning through accidental swallowing of a commercial DDT preparation is reported in the February 14 issue of *The Journal of the American Medical Association* by Nathan J. Smith, M.D., Department of Pathology, Veterans Administration Center, Wadsworth, Kansas.

The victim was a man of 58 who drank, accidentally, an insecticide which contained 5 per cent DDT. Within an hour he was suffering from severe gastrointestinal symptoms. They continued with increasing severity, and five days later he was admitted to the Veterans Administration Center in Wadsworth. Treatment proved futile and he died the next day.

At autopsy degenerative changes were found in the liver and kidney. When rabbits were experimentally poisoned with the same insecticide or given 5 per cent DDT in kerosene (another ingredient of the insecticide), the same effects were noted at autopsy.

"With the increasing use of DDT insecticides by the general public, it is not unlikely that occasional cases of poisoning from its accidental ingestion will be encountered," Dr. Smith warns.

"...pressure of the gravid uterus mechanically interferes..."

in pregnancy

"Constipation is the rule. The pressure of the gravid uterus mechanically interferes with the function of the small intestine and colon per se and also renders the act of defecation less efficient by its effect on the diaphragm, abdominal muscles and levator ani."

—Bockus, H. L.: Gastro-Enterology, Philadelphia, W. B. Saunders Company, 1946, vol. 3, p. 999.

"Smoothage" for Management of Constipation in Pregnancy

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Voice of Medicine

Editor of Journal:

Dr. Streck's letter in THE JOURNAL served at least one good purpose, in that many of us who had heard Dr. McCormick's original presentation, eagerly reread this exceptional paper, thinking perhaps that we had missed some of the objectionable ideas. None are present.

Dr. Streck surely knows that man has long since stopped living entirely by natural laws. This thing we call civilization is entirely man-made. I for one, would hate to see any of the epidemic diseases take their natural courses unstemmed by medical knowledge. In a very real sense, this process of over-breeding, principally from the bottom of the social scale, is an epidemic, or rather a pandemic. Dr. McCormick has merely prescribed, to the best of his knowledge, his cure for such a social disease.

Leading eugenicists, economists, and geo-politicians are fully in accord with Dr. McCormick's ideas. To my way of thinking, he has focused our attention on the most important, basic problem of civilization.

War, plague and famine reduce our population in a 'natural' fashion, but somehow I prefer Dr. McCormick's proposed 'unnatural' methods of control.

This fine article has made a lot of us think, some in a logical fashion, others in a too emotional manner. Let us hope that the emotional ones will see the logical 'little candle' which Dr. McCormick has lit. Let us further hope that these emotional individuals are phototrophic.

BYRON W. KILGORE, M.D.
Indianapolis.

During forty years of practice this is my first communication to THE JOURNAL, and I am writing to compliment you on the publication of Dr. F. A. Streck's article under "Voice of Medicine."

Realizing that this subject admits of argument on both sides, nevertheless it is refreshing to read this type of article in present day non-religious publications.

R. J. IVES, M.D.
Francesville.

Many of the older physicians of Indiana will remember Dr. Emerson, former Dean of the Medical Department of Indiana University, and his lectures to the profession on appendicitis after returning from a tour of the Orient, his comments on the infrequency of the disease among the people of the Orient, as compared with those of the Western world, and that he attributed the difference in the incidence of appendicitis to the different mental attitude toward life and its problems and the effect of that attitude upon the autonomic nervous system.

It was my privilege to attend a meeting of the All India Medical Conference in Bombay during Christmas week and, among others, attend a symposium on appendicitis given by some of the best men in medicine in India. While not as prevalent as in the United States of America, it is now much more prevalent than in the days when Dr. Emerson visited the Orient, and is claiming the attention of its physicians and surgeons. If Dr. Emerson's conclusions were correct, we may attribute this increase to the rapidly changing conditions now everywhere apparent.

The meeting was attended by over 2,000 physicians and surgeons from all parts of India. The essays were presented and the meeting conducted in English under a large tent erected in the compound of the J. J. (Jeebhoy) Hospital Group. The tent had a seating capacity of about 3,000, equipped with amplifiers; speakers could be understood distinctly, even when accent and pronounciation were different from what we ordinarily hear.

Many of the men and women in attendance have studied in England and in the United States, and American medicine and writers were frequently referred to in papers and discussions. The entire meeting was on a high plane and would have been a credit to our profession in any country. When I assumed the authority of extending the felicitations of the profession in the United States to the profession in India, it was received with hearty applause. American medicine is held in very high esteem in all the countries that I have been permitted to visit. May she always be worthy.

H. G. WEISS, M.D.
Evansville, Indiana.


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Medical Panorama by the Associate Editor

The CONNECTICUT State Medical Society has recently added 84 new student members, bringing their student membership up to a total of 109. This type of membership apparently has been established fairly recently. The *Connecticut State Medical Journal* reports that the plan has had an enthusiastic response on the part of medical students. In fact, the interest and appreciation expressed by the student members has been sufficient to prompt the suggestion that the Connecticut county societies develop further plans for establishing close relationship with medical students from their communities.

The student members are privileged to receive the state journal on payment of one-half of the regular subscription price. Through this medium the students become acquainted with the traditions of medicine, and those who are enrolled in schools outside Connecticut are kept in touch with the medical news from home.

———ISAM———

The *Bulletin of the Hennepin County Medical Society* (MINNESOTA) has announced the initiation of a ten-year study of arteriosclerosis and circulatory hypertension. A group of approximately 300 St. Paul and Minneapolis men between the ages of forty-five and fifty-four will be the clinical subjects. The investigation is to be carried out by a group of scientists who will be directed by Dr. Ancil Keys.

The etiological factors responsible for sclerotic changes in the circulatory system will be studied. The effect of dietary habits and physical activity, as well as the factors of worry and tension will be especially investigated. A special group of "older athletes," men who have followed a program of physical exercise throughout their middle age, will be watched for the ten-year period to determine, if possible, the effect of exercise.

Many business organizations of St. Paul and Minneapolis are cooperating and their employees of the proper age bracket have been invited to participate. The program also carries the endorsement of the heart committees of the Minnesota Medical Association and the two county medical societies.

The *Journal of the OKLAHOMA State Medical Association* recently announced in an editorial the building and equipping of office facilities by the town of Texhoma, for the purpose of attracting a young doctor of medicine to the practice of medicine in their town. The practical interest which the citizens of Texhoma have displayed in this undertaking is illustrated by the fact that a bond issue of $30,000 was involved.

The office is described as having been equipped with facilities for diagnosis and up-to-date medical care, and is now occupied by a young graduate of Oklahoma School of Medicine.

The editorial compliments the citizens of Texhoma and other similar communities for an enlightened viewpoint on the problem of rural and small-town medical care, and also points out that one of the public relations jobs of the medical profession should be the enlightenment of the entire country as to the necessity for improved facilities for the practice of modern medicine, and the need for special measures for small rural towns in providing such inducements for practice.

———ISAM———

The *PITTSBURGH Medical Bulletin* reports on the formation of a medical advisory Board for the United Mine Workers' Health and Welfare Fund. Dr. R. R. Sayers is the chairman of the Advisory Board and has requested the cooperation of doctors in setting up plans. The Allegheny County Medical Society is already on record as being willing to cooperate and their bulletin states that all the doctors who have been contacted have been most willing.

There are about 383,000 bituminous coal miners with some 1,700,000 beneficiaries. Approximately $25,000,000 has been collected for the fund to date. The Pittsburgh Bulletin points out that proper administration of such resources will be of tremendous advantage in improving the medical status of the miners and their families, and urges the medical profession to aid in establishing a sound and workable plan for the medical portion of the project.

What's Going On In Indiana by the Executive Secretary

Third "Grass Roots" Conference. In March we called attention to the fact that the annual session of the American Medical Association would be held in Chicago June 21-25, 1948, and urged Hoosier physicians to write now for reservations. A new angle of interest to Indiana doctors is a decision by the board of trustees of the A.M.A. to hold another National Conference of County Medical Society Officers, commonly called the "Grass Roots" Conference. It will be recalled that this conference was created by a resolution presented to the A.M.A. House of Delegates by Indiana delegates, and that Dr. A. M. Mitchell of Terre Haute was chairman of the conferences at Atlantic City in June, 1947, and Cleveland in January, 1948, and has the assignment for next June. The conference will be held Sunday, June 20, 1948. It will be worth your while to attend it.

——ISMA———

Education Program Under Way. The Vanderburgh County Medical Society, which embraces Evansville, has launched a graduate education program that may well become a pattern for other larger county societies. Physicians within a radius of fifty miles of Evansville are invited, the state lines of Kentucky and Illinois being no barriers. The programs are held monthly, beginning in the afternoon and ending about 9 o'clock at night. Outside of papers by local physicians, teaching talent is drawn from Indiana University School of Medicine, University of Illinois College of Medicine and the University of Louisville School of Medicine. Febrile diseases and traumatic surgery were the general subjects of the first two meetings. The society is paying the expenses of the course, no registration fee being charged. Nearly 175 physicians attended the opening session in February, sixty-three of them living outside Vanderburgh county. The remark of one doctor from a small Illinois town was significant: "I've been hungry for something like this," he said. The Evansville newspapers have been generous with their space in reporting the sessions. The graduate education program is improving medical knowledge, developing friendships among physicians in the fifty-mile radius of Evansville and, probably most important of all, is directing public attention to the fact that most physicians are constantly learning new and better ways to cure disease and prolong human life.

Farm Safety Program. Hospitals of Indiana are asked by the Agricultural Extension Service of Purdue University to supply information about farm patients. The information is used in a study of farm accidents, the object being to find a way to improve farm and home safety. Data has been collected for approximately a year. Some of the figures are interesting to physicians. As would be expected, farm machinery accidents were far more common than any other kind. Of seventy-eight farmers injured by machinery, thirty-four were victims of corn picker mishaps. Tractors ranked second, with fifteen cases. Deaths occurred in seven instances.

——ISMA——

Public Relations Program. Steps toward formation of a public relations program for the state medical association were taken at a meeting of the Committee on Public Relations on March 21. The committee members heard a report by the chairman on what other state associations are doing—many of which have ambitious programs. No nonmedical subject is commanding more attention than public relations among leaders of the profession. All are in agreement that something should be done to win greater public favor. Opinions differ on what—and how. A speaker at the recent National Conference on Medical Service at Chicago declared that more attacks had been made on the medical profession in the public press in the last five years than in the previous fifteen-year period. This is hard to understand in view of all medical science has done to lengthen life and the services physicians perform without receiving compensation. It is apparent that too many people are looking at only the hole in the doughnut. It is the job of public relations to make them see the doughnut, as well.

——ISMA——

This and That. Officers of the new Section on Obstetrics and Gynecology are Dr. Dudley A. Pfaff, Indianapolis, chairman; Dr. David A. Bickel, South Bend, vice-chairman, and Dr. E. L. Engel, Evansville, secretary. . . . Miss Barbara Ketterman, of Madison, who holds one of the nursing school scholarships of the state medical association, was honor student of the freshman class at Methodist Hospital, Indianapolis. . . . The Indianapolis Medical Society will hold a public relations program Tuesday, April 13, with Lester H. Perry, executive secretary of the Medical Society of the State of Pennsylvania, as the speaker. Guests are welcome.

News Notes

Announcement has been made recently of the association of Dr. Palmer Eicher with the Indianapolis Clinic, at 3209 N. Meridian Street, in Indianapolis. Doctor Eicher is a specialist in orthopedic surgery. He is a graduate of Indiana University School of Medicine, and served a residency in Oklahoma City following four years in the Army. Prior to entering the service Doctor Eicher practiced in Decatur.

Dr. Meredith B. Gossard, of Vincennes, was recently appointed coroner of Knox County. He succeeds Dr. Herbert O. Chattin, who resigned.

Miss Donna Lee, of Bedford, and Dr. Philip C. Hennessee, of Portland, were married on February seventh, at the Broadway Evangelical Church in Indianapolis. Doctor Hennessee is a graduate of the Indiana University School of Medicine, and Miss Lee is a graduate of the Indianapolis General Hospital School of Nursing. They will live in Portland.

Dr. William M. Kelly has moved his office to 5376 East Washington Street in Indianapolis. Formerly located at 3209 N. Meridian Street, Doctor Kelly is a veteran of World War II, having served with the Army medical service in the European theater. He is a graduate of the Indiana University School of Medicine, and served his internship at Indianapolis General Hospital.

Dr. J. L. Loudermilk, formerly of Greenwood, has opened an office for the practice of radiology in the Wayne Pharmacal Building in Fort Wayne.

The newly formed Indiana Heart Foundation has elected the following officers: Dr. Robert M. Moore, president; Ernest M. Hawkins, vice-president; Russell L. White, treasurer; Kenneth R. Miller, secretary of the board of trustees; and Mrs. Grace M. Tanner, executive secretary.

Award of two additional scholarships has been announced by the Indiana State Medical Association. A medical school scholarship of $500 per year was presented to William J. Pierce, of Indianapolis, a junior at Indiana University School of Medicine. A nursing school scholarship of $200 per year was awarded to Miss Mary Lou Sharpe, of Elkhart, a student nurse at St. Joseph Hospital, Mishawaka.

Dr. Wilbert McIntosh, formerly of Cory, has opened an office for the practice of medicine at Riley. A graduate of the Indiana University School of Medicine, in 1944, Doctor McIntosh served for the past two years with the Army Medical Corps, and was on duty in Japan until December 1947, when he was retired from service.

Announcement has been made of the opening of an office for the practice of medicine in DeMotte by Dr. Kenneth B. Ockermann, a native of Louisville. He received his degree from the University of Louisville School of Medicine, and served as a Captain in the medical division of the Army during World War II. He served in the European theater for more than two years. Upon his release from service he began the practice of medicine in Bluefield, West Virginia.

It is the aim of the Indiana State Medical Association to provide postgraduate instruction in each community. The Terre Haute Academy of Medicine is the postgraduate section of the Vigo County Medical Society and holds monthly lectures given by leading teachers in the medical schools from all over the United States. A round table discussion follows the lecture. A dinner meeting is held at the Deming Hotel in Terre Haute on the first Friday of each month and all physicians are invited. With the academy dues of $30.00 added to the county society dues of $25.00, the total Vigo County dues are $55.00 a year and this amount of money provides the best talent available.

The Indianapolis Medical Society extends an invitation to members of the Indiana State Medical Association to hear a paper on "The Dollars and Sense of Public Relations" to be given by Lester H. Perry, Harrisburg, Pennsylvania, executive secretary of the Medical Society of the State of Pennsylvania, in Indianapolis, Tuesday night, April 13, at the Athenaeum.

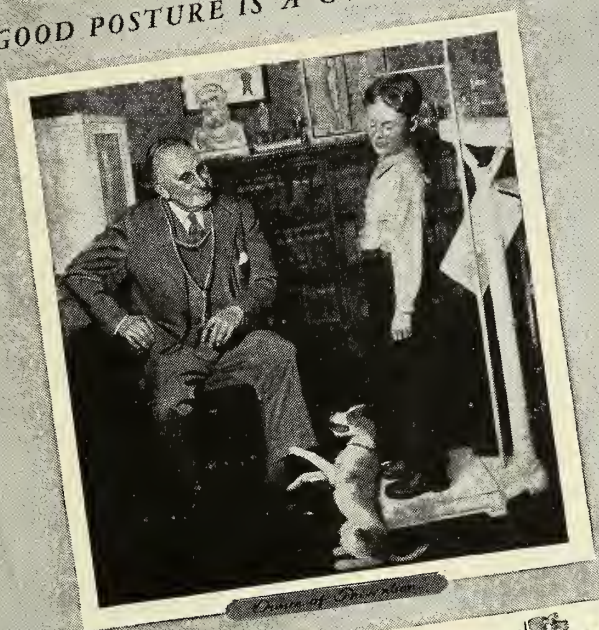
The meeting will be devoted entirely to the subject of medical public relations. After Mr. Perry's paper there will be general discussion.

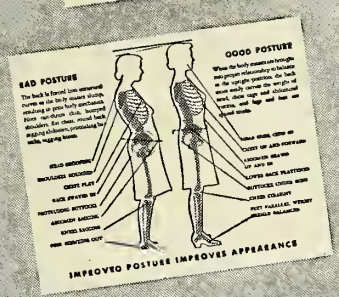
Mr. Perry spoke on "Modern Medical Public Relations Inventory" at the Midwest Regional Conference, sponsored by the A.M.A. Council on Medical Service, at Cleveland, early in January. It was one of the finest addresses on the program, and brought Mr. Perry the invitation to speak in Indianapolis.

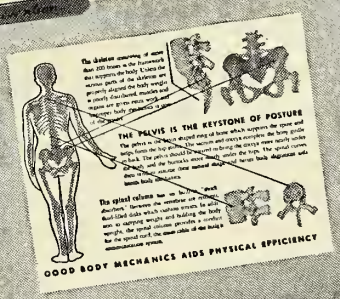
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In its tenth year, Posture Week will again highlight our year-round program of focusing attention on the significance of good posture as an important element in good health and physical fitness.

Through practical cooperation and voluminous correspondence physicians, educators and lay groups in the field of public health have expressed their appreciation for this work.

Naturally, we hope to again merit the continued cooperation and approval of the medical profession.

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"We all admire and love him, and wish him well the remaining years of a useful life."

The foregoing is an extract from a letter by Dr. J. C. Burkle, secretary of the Tippecanoe County Medical Society, which announced to THE JOURNAL that Dr. Charles Hupe of LaFayette had resigned as treasurer of the society after serving for nearly forty-six years as its treasurer. Doctor Hupe is past ninety years of age, and for sixty-four years has practiced medicine. Despite his age, Doctor Hupe attends practically all of the county society meetings and enjoys them.



Dr. Charles Hupe

Doctor Burkle made this further comment in his letter: "Doctor Hupe has endeared himself to the medical men, and especially to the members of the Tippecanoe County Medical Society. His sterling character, honesty, and love for humanity have helped him to come into the hearts of doctors and laymen alike."

It is doubtful if any Indiana county medical society officer has served for a longer period than Doctor Hupe. The Indiana State Medical Association congratulates him on these many years of useful service, and wishes him good health and many more years of life.

Dr. Warren H. Pike, Jr., has begun the practice of medicine in Hobart. After graduating from Johns Hopkins University, approximately two years ago, Doctor Pike was commissioned a captain in the Army Medical Corps, and served for thirteen months in Japan.

The Seventh District Medical Society will present a scientific "double header" at its spring meeting on May 4 at the Athenaeum in Indianapolis, with the appearance of Dr. Byrl R. Kirklin and Dr. Arlie Barnes of the Mayo Clinic.

Dr. Kirklin currently is professor of radiology and director of the division of radiology, Mayo Foundation, University of Minnesota Graduate School. During the recent war he was a colonel stationed in the office of the surgeon general as chief consultant in radiology.

Dr. Barnes, who is brought to Indianapolis by the Indiana Society for Crippled Children and the Indiana Heart Foundation, is chief of the section of cardiology at Mayo's and is well known throughout the United States for his work. Both Dr. Barnes and Dr. Kirklin are graduates of the Indiana University School of Medicine.

The Seventh District Society extends an invitation to members of the Indiana State Medical Association to attend this May 4 session. The meeting will start at 8:15 p. m.

Recently discharged from the Army Medical Corps, after having served for three years, Dr. E. S. Rifner has opened an office for the practice of medicine in Van Buren.

Dr. F. M. Williams, Jr., of Pendleton, has completed postgraduate work at the University of Pennsylvania, and has moved to Anderson, where he is occupying the offices of his late father, Dr. F. M. Williams.

The twenty-ninth annual session of the American College of Physicians will be held in San Francisco, April 19 to 23, 1948. Dr. Kenneth G. Kohlstaedt, of Indianapolis, will be a participant in a panel discussion on Hypertension, Medical and Surgical Aspects, on Thursday afternoon, April 22.

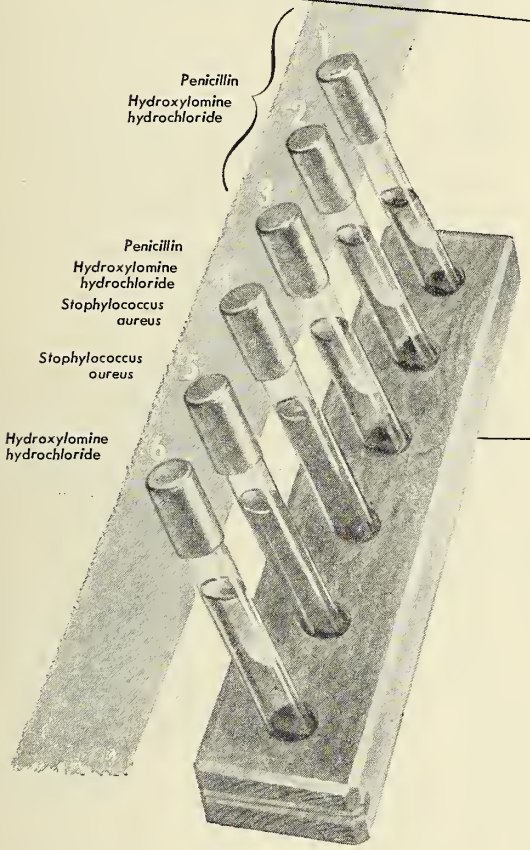
The Centennial Observance of the Indianapolis Medical Society was held in the Athenaeum on February twenty-fourth, and was attended by more than six hundred members and guests. The program, which was presided over by Dr. Bert E. Ellis, president of the society, included the following: "One Hundred Years Ago," by Dr. William N. Wishard, Jr.; "Reminiscences," by Dr. Edgar F. Kiser; "Greetings from the State of Indiana," by the Honorable Richard T. James, Lieutenant-Governor of Indiana; "Greetings from the City of Indianapolis," by the Honorable Al Feeney, Mayor of Indianapolis; "Greetings from the A.M.A.," by Mr. Thomas A. Hendricks; "Greetings from the Indiana State Medical Association," by Dr. Cleon A. Nafe; "A Tribute from the Woman's Auxiliary," by Mrs. Otto H. Bakemeier; "Response for the Ministry of Indianapolis," by the Reverend Jean S. Milner; and "Response for the Legal Profession of Indianapolis," by Mr. Kurt F. Pantzer. A buffet followed the program.

The general oral and pathology examinations (Part II) for all candidates will be conducted in Washington, D.C., by the **American Board of Obstetrics and Gynecology** from Sunday, May 16, through Saturday, May 22, 1948. The Shoreham Hotel in Washington will be the headquarters. Formal notice of the exact time of each candidate's examination will be sent him several weeks in advance of the examination dates. Hotel reservations may be made by writing direct to the Shoreham Hotel. Candidates for re-examination in Part II must make written application to the Secretary's Office not later than April 1, 1948. Candidates in military service are requested to keep the Secretary's Office informed of any change in address. Applications are now being and will be received until November 1, 1948, for the 1949 examinations. For further information and application blanks address Paul Titus, M.D., Secretary, 1015 Highland Building, Pittsburgh 6, Pennsylvania.

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Dr. M. J. O'Neill has moved his office from DeMotte to Rensselaer, where he is associated with the Johnson and Washburn Clinic.

The Cincinnati Proctologic Society, whose membership includes residents of Indiana, Kentucky and Ohio, has announced the following remaining meetings of the year: April 9, 6:15 p.m., Hotel Gibson, Cincinnati, "Case Reports of Epidermoid Carcinoma of the Anus and Colostomy in Lymphopathia Venerea," by Dr. A. G. Carmel; May 14, 6:15 p.m., Hotel Gibson, Cincinnati, "Drug Sensitivity in Proctology," by Dr. Arthur Wells. These meetings are open to all members of state societies. Reservations may be made through Stewart R. Jones, M.D., 801 Carew Tower, Cincinnati 2, Ohio.

The Indiana National Guard is in the formative period of its reorganization. At the present time there are not enough doctors to care adequately for the men who have enlisted in the National Guard units, and as the quota for Indiana is filled even more physicians will be needed.

The compensation for work done in the guard is on the regular officer's pay status. Each Monday evening, from 7:30 to 10:00, is a drill night, for which each officer is paid in accordance with his rank. And he must attend drill in order to be paid. In addition, there are physical examinations on men enlisting in the guard for which a small fee is paid by the state.

There are many vacancies open and any physicians who are interested in joining the National Guard can obtain details from the Adjutant General's Office in the State House, Indianapolis.

This will serve as an appeal to the medical profession to lend its aid and support to a very worthwhile and necessary organization.

The Areal Meeting of the **American Academy of Pediatrics** will be held at the Hotel Statler, Buffalo, New York, April 29-May 2, 1948. Members of state societies are welcome to attend. The registration fee will be $5.00 for such nonmembers, together with a $5.00 registration for which each registrant receives a ticket to the banquet, making a total registration fee of $10.00. Registration may be made by writing to Dr. C. G. Grulee, American Academy of Pediatrics, 636 Church Street, Evanston, Illinois, enclosing a check for $10.00, or registration may be at the time of the meeting.

The National Gastroenterological Association will hold its Thirteenth Scientific Session at the Hotel Pennsylvania in New York City on June 7-10, 1948. Further details and a copy of the program may be obtained by writing to the Secretary, National Gastroenterological Association, 1819 Broadway, New York 23, New York.

The Northern Tri-State Medical Association will hold its seventy-fifth annual meeting in Findlay, Ohio, on April 13, 1948. Speakers on the program are as follows: "The Depressive Syndrome in General Practice," by G. N. Raines, Captain M. C., U. S. N., Bethesda, Maryland; "General Review of Thoracic Surgery," by Herbert D. Adams, the Lahey Clinic, Boston; a Clinical Pathological Conference by Plinn F. Morse, Pathologist, Harper Hospital, Detroit; the luncheon address will be delivered by Roscoe L. Sensenich, of South Bend; "Resume of Surgical Treatment of Peptic Ulcer," by Thomas E. Jones, of the Cleveland Clinic; "Diagnosis and Treatment of Brucellosis," by C. Wesley Eisele, Department of Medicine, University of Chicago; and "Treatment of Ununited Fractures," by Dallas B. Phemister, University of Chicago.

The annual convention of the **Mid-West Physical Education Association** will be held in Indianapolis April 7 to 10. Robert Yoho, of the Indiana State Board of Health, is the convention manager.

Directors of the recently organized **Alembert W. Brayton Foundation** have been elected. They are: Drs. George W. Bowman, John R. Brayton, Clyde G. Culbertson, John E. Dalton, Don E. Kelly, Charles W. Meyers, John C. Slaughter, John R. Thrasher, Walter D. Tinsley, and John D. Van Nuys, and Mr. Hubert Hickam, attorney, and former Governor Henry F. Schricker.

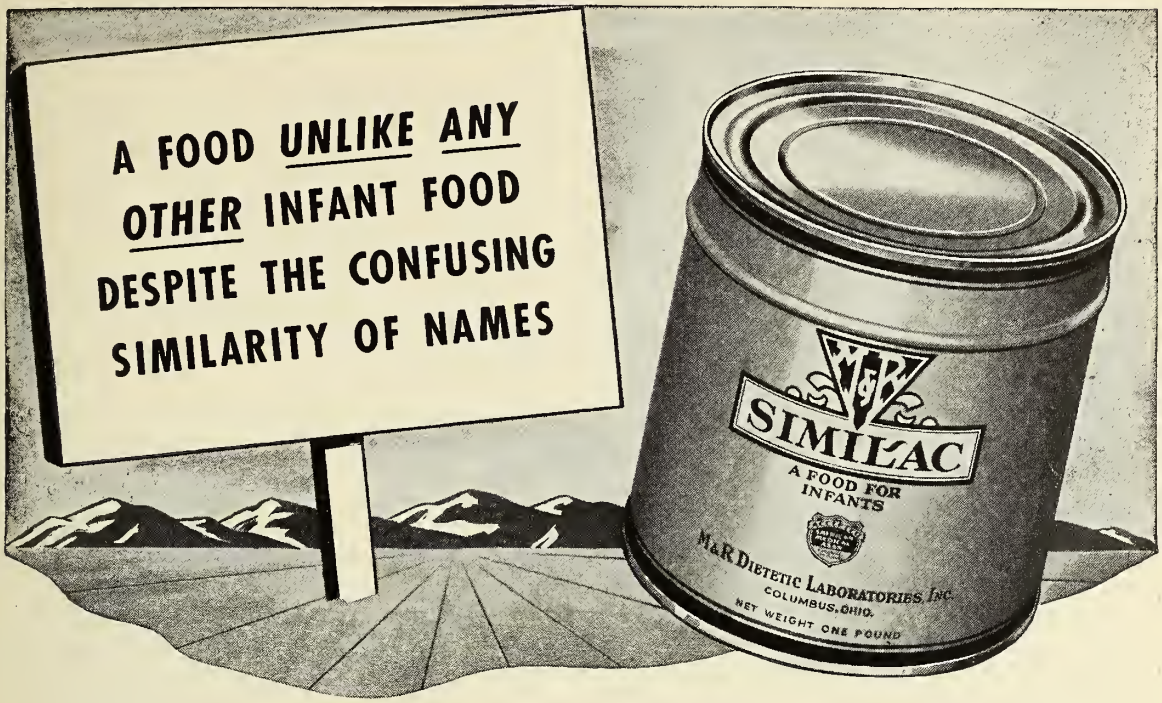
Dr. E. P. Buckley, of Jeffersonville, has moved to Louisville, Kentucky.

Dr. Joseph M. Black has opened an office for the practice of medicine in Seymour. He is a graduate of Indiana University School of Medicine, in 1944, and served an internship in genito-urinary diseases at Indianapolis General Hospital. Doctor Black entered the armed services in March 1946, and served as chief genito-urinary surgeon at Fort Knox, Kentucky, where he spent the past sixteen months, prior to his discharge.

Dr. Harold L. Beddoe, of Madison, has moved to Tulsa, Oklahoma, where he will practice medicine. Doctor Beddoe had located in Madison following his release from service.

Dr. Henry Conrad, of Hamilton, Missouri, recently moved to Milan, where he is associated with the Whitlatch Clinic.

Following his recent release from service, Dr. Floyd B. Coleman has opened an office for the practice of medicine in Waterloo. A graduate of Indiana University School of Medicine in 1945, he spent his internship at the Methodist Hospital in Indianapolis. During his twenty-one months in the Army he was stationed at Percy Jones Hospital, at Battle Creek, Michigan.



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Indiana University Alumni Day

More than twenty-five hundred physicians, graduates of the Indiana University School of Medicine since its establishment in 1903, are being invited to participate in the school's first Alumni Day program which will be held at the University Medical Center in Indianapolis on Wednesday, May 5.

It will be the first time in the history of the school of medicine that all alumni have been invited to return to the Indianapolis campus and extensive plans are being completed for the entertainment of the physicians. The occasion also coincides with the annual Founders Day observance of Indiana University, giving it double significance for the medical alumni.

A number of the distinguished alumni of the school of medicine have been invited to participate in the day's program of clinics and meetings. Among these are Brigadier General George Ellis Armstrong, deputy Surgeon General, U. S. Army; Dr. William T. Green, Buckminster Brown Professor of Orthopedic Surgery, Harvard Medical School, Boston; Dr. Lowell T. Coggeshall, dean of the Division of Biological Science at the University of Chicago; Dr. Bruce K. Wiseman, Associate Professor of Medicine at the Ohio State University School of Medicine; Dr. Edward G. Billings, Associate Professor of Psychiatry at the University of Colorado School of Medicine; Dr. George P. Robb of Washington, D. C.; Dr. Norvelle C. LaMar of New York City; and three members of the faculty of the University of Minnesota Postgraduate School of Medicine: Dr. Byrl Raymond Kirklin, Professor of Radiology, Dr. Frank C. Mann, Professor of Pathology and Experimental Medicine, and Dr. Arlie R. Barnes, Professor of Medicine.

Arrangements for the Alumni Day program announced by Dr. J. Neill Garber, general chairman, include registration at the medical school, 1040 West Michigan street, at 9 o'clock in the morning, followed by a clinical program presented by some of the visiting alumni.

At noon a luncheon will be served on the campus for all alumni. The clinical program will be resumed at 2 o'clock, the afternoon program including discussion of forming an alumni association of the school of medicine.

While the alumni are attending the afternoon session, a gala style show and tea will be held at Ball Residence for all visiting women physicians and the wives of visiting physicians. Arrangements for the style show and tea are being completed by Dr. Jane Ketcham. The style show will be presented by the William H. Block Company.

The Alumni Day activities will conclude with a dinner-dance to be held at the Athenaeum at which C. Walter McCarty, member of the University Board of Trustees, will be the principal speaker.

Assisting Dr. Garber in the arrangements for Alumni Day as members of the committee are: Dr. C. J. Clark, Dr. J. William Wright, Dr. Marlow W. Manion, Dr. Russell J. Spivey, Dr. Clyde Culbertson, Dr. Jane Ketcham, Dr. Thomas B. Bauer, Dr. John J. Mahoney, Mason Baker, Hunter Soper and Albert J. Schneider, senior medical students; Marc G. Waggener, University News Bureau.

A new type of postgraduate school was inaugurated at Methodist Hospital in Gary on January thirteenth. The University of Illinois School of Medicine has been sending staff members to the hospital to present a series of twenty classes on "Cardiology and Electrocardiography." The university provides the text and the material, and a tuition fee of $50.00 is charged. The plan met with such success that a series of lectures in the fall is being planned.



Part of a class of 56 Lake County physicians attending a postgraduate course at Methodist Hospital at Gary.

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Deaths

Eugene E. Hamilton, M.D., of Dayton, died on March ninth, at the age of sixty-nine. A graduate of the Medical College of Indiana, Indianapolis, in 1903, Doctor Hamilton had practiced for twenty-nine years in New Leipzig, North Dakota, before going to Dayton, where he had practiced for ten years. He was a member of the Tippecanoe County Medical Society and the Indiana State Medical Association, and was a Fellow of the American Medical Association.

* * *

Dorsey M. Hines, M.D., of Auburn, died on February twenty-fifth, after a long illness. He was sixty-two years of age. He graduated from the Indiana University School of Medicine in 1909, and had practiced in Auburn since that time until forced to retire from practice two years ago, due to ill health. A veteran of World War I, Doctor Hines had also served as selective service examiner in World War II. He was a member of the DeKalb County Medical Society and the Indiana State Medical Association, and was a Fellow of the American Medical Association.

* * *

C. Fred Inlow, M.D., of Shelbyville, died on February fourteenth, at the age of fifty-three. He had been ill for approximately three years. He graduated from Rush Medical College, in Chicago, in 1922, and was a specialist in urology. He was a veteran of World War I, and was a member of the Shelby County Medical Society and the Indiana State Medical Association, and was a Fellow of the American Medical Association.

* * *

Calvin H. English, M.D., retired physician of Fort Wayne, died on February fourth after a long illness. He was ninety years of age. A graduate of Fort Wayne College of Medicine, in 1884, Doctor English had practiced in Fort Wayne for more than fifty years. He was an honorary member of the Allen County Medical Society, and the Indiana State Medical Association, and was a Fellow of the American Medical Association.

Emery G. Bounell, M.D., of Hillsboro, died on February twentieth, after a short illness. He was seventy-six years of age. A graduate of the Medical College of Indiana, in 1895, Doctor Bounell had practiced in Hillsboro for more than forty years. He was a veteran of World War I. He was an honorary member of the Fountain-Warren County Medical Society, the Indiana State Medical Association, and the American Medical Association.

* * *

Charles C. Chapin, M.D., former superintendent of Logansport State Hospital, died suddenly on February twenty-sixth at Wabash Valley Sanitarium, in LaFayette, where he had served as superintendent since January of this year. He was fifty-four years of age. Doctor Chapin graduated from the College of Physicians and Surgeons of Los Angeles, in 1918, and served in the Army Medical Corps in World War I. He was a member of the Tippecanoe County Medical Society, the Indiana State Medical Association and the American Medical Association.

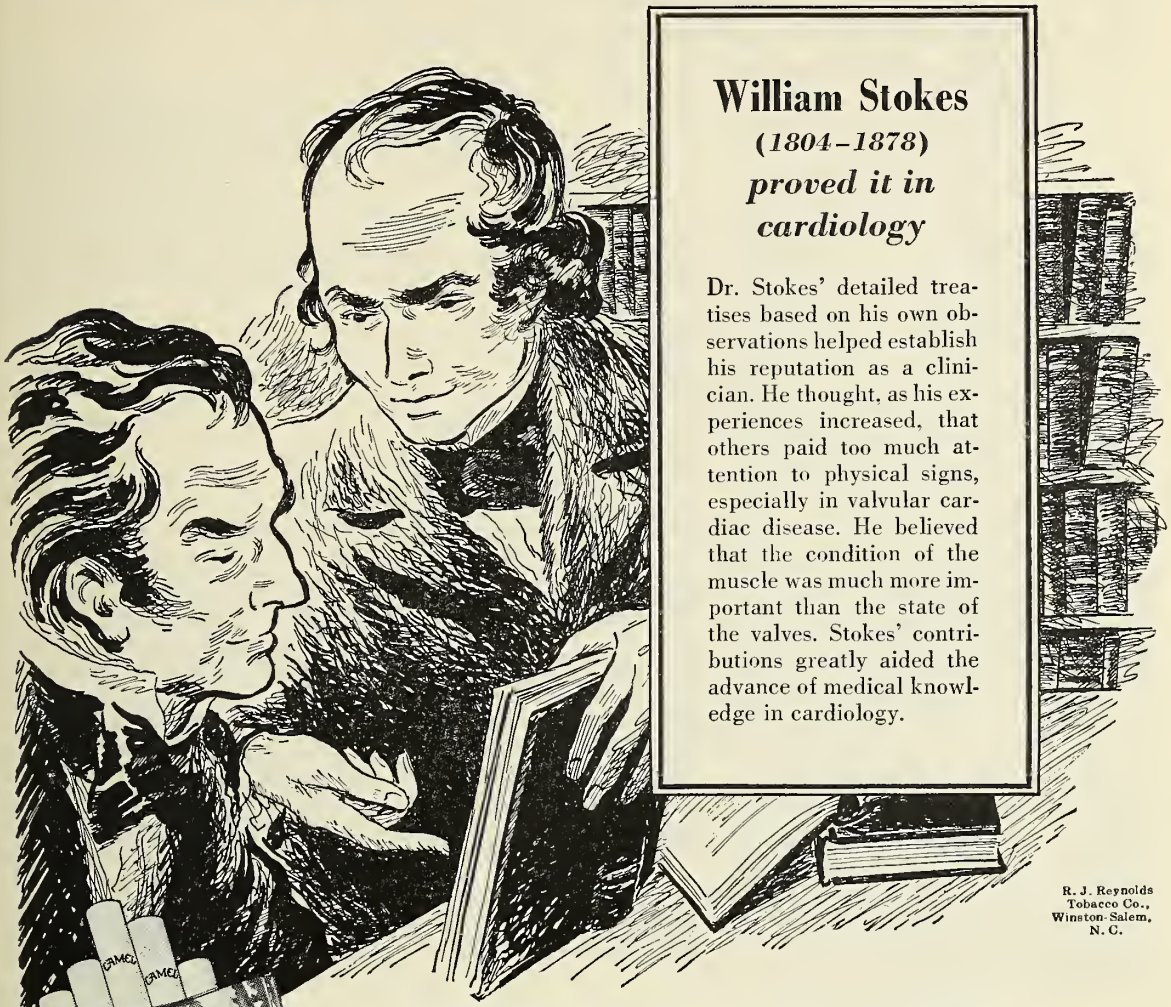
* * *

James D. McKay, M.D., of Marion, died on February nineteenth, after a short illness. He was seventy-eight years of age and had practiced in Marion for more than fifty years. Doctor McKay graduated from the Medical Faculty of Trinity University, Toronto, in 1895, and specialized in ophthalmology and otorhinolaryngology. He was an honorary member of the Grant County Medical Society and the Indiana State Medical Association, and was a Fellow of the American Medical Association.

* * *

Henry J. Graham, M.D., retired physician of Mishawaka, died on February fifth, at the age of seventy-two, following a long illness. He graduated from Wayne University College of Medicine, in Detroit, in 1900, and had practiced in Mishawaka for many years, until illness forced his retirement thirteen years ago.

Experience is the Best Teacher



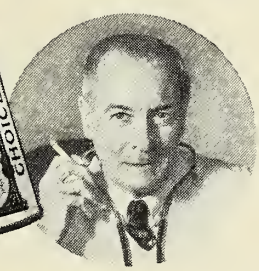
William Stokes
(1804–1878)
proved it in cardiology

Dr. Stokes' detailed treatises based on his own observations helped establish his reputation as a clinician. He thought, as his experiences increased, that others paid too much attention to physical signs, especially in valvular cardiac disease. He believed that the condition of the muscle was much more important than the state of the valves. Stokes' contributions greatly aided the advance of medical knowledge in cardiology.

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Society Reports

INDIANA STATE MEDICAL ASSOCIATION

EXECUTIVE COMMITTEE

February 14, 1948.

Roll call showed the following present: C. H. McCaskey, M.D.; Cleon A. Nafe, M.D.; A. P. Hauss, M.D.; Frank B. Ramsey, M.D., associate editor of THE JOURNAL; A. F. Weyerbacher, M.D., treasurer; Albert Stump, attorney, and Ray E. Smith, executive secretary.

Guests: Rollis S. Weesner, Executive secretary, Indiana Cancer Society, and Charles F. Thompson, M.D., chairman, Committee on Veterans Affairs and Rehabilitation.

On motion of Drs. Nafe and Hauss, Dr. McCaskey was re-elected chairman of the Executive Committee for 1948.

Treasurer's Office

Mutual Medical Insurance, Inc. The treasurer reported on the financial status of Mutual Medical Insurance, Inc.

On motion of Drs. Hauss and Nafe the treasurer was authorized to invest $5,000 out of the general fund in Series G United States Treasury Bonds.

1948 Annual Session, Indianapolis, October 26, 27 and 28, 1948

Medal for scientific exhibitors. The secretary was directed to procure a suggested design and costs of a plaque.

Public meeting, Wednesday, October 27, 1948. It was the consensus of the Executive Committee that the public meeting on Wednesday, October 27, 1948, is the responsibility of the local Convention Arrangements Committee. Arrangements for that meeting are to be made by that committee, with the approval of the Executive Committee. Expenses of this meeting are to be taken care of out of the budget allowed the Committee on Convention Arrangements.

Statements of receipts and expenditures for January for the association committees and THE JOURNAL were approved.

1949 Annual Session

Conflict in dates. Upon learning that the dates of October 4, 5, 6 and 7, 1949, will conflict with the dates set for the annual session of the Wisconsin State Medical Society, the secretary was directed to find other available dates in September and October.

Centennial labels. The question of using gummed labels for calling attention to the centennial session was referred to the Committee on Centennial Celebration.

Legislative Matters

National

Indiana State Chamber of Commerce dinner, Washington, April 26, 1948. On motion of Drs. Nafe and Hauss it was voted to pay the expenses of Dr. N. M. Beatty, co-chairman of the Legislative Committee, should he wish to attend the legislative dinner of the Indiana State Chamber of Commerce in Washington on April 26.

Organization Matters

Requests for contributions from the American Red Cross, National Society for Medical Research and Indiana Heart Foundation, Inc., were rejected on motion of Drs. Hauss and Nafe.

Conference of Presidents. The invitation to pay $50.00 dues and be a member of the Conference of Presidents of state medical associations was turned down on motion of Drs. Nafe and Hauss.

Medical student scholarship charms. On motion of Drs. Nafe and Hauss the design of these charms was approved and the wording was left up to the chairman of the Executive Committee and the executive secretary.

A. M. A. Affiliate Fellowship. On motion of Drs. Nafe and Hauss the Executive Committee declared Dr. W. H. Hoppenrath of Elwood eligible for Affiliate Fellowship in the American Medical Association.

Medical Economics

The secretary reported receipt of letters recently from four communities asking for help in procuring physicians for these communities.

Letter from the Noble County Medical Society approving of the action of the House of Delegates against the creation of an ethics committee at the state level was read.

Indiana Cancer Society

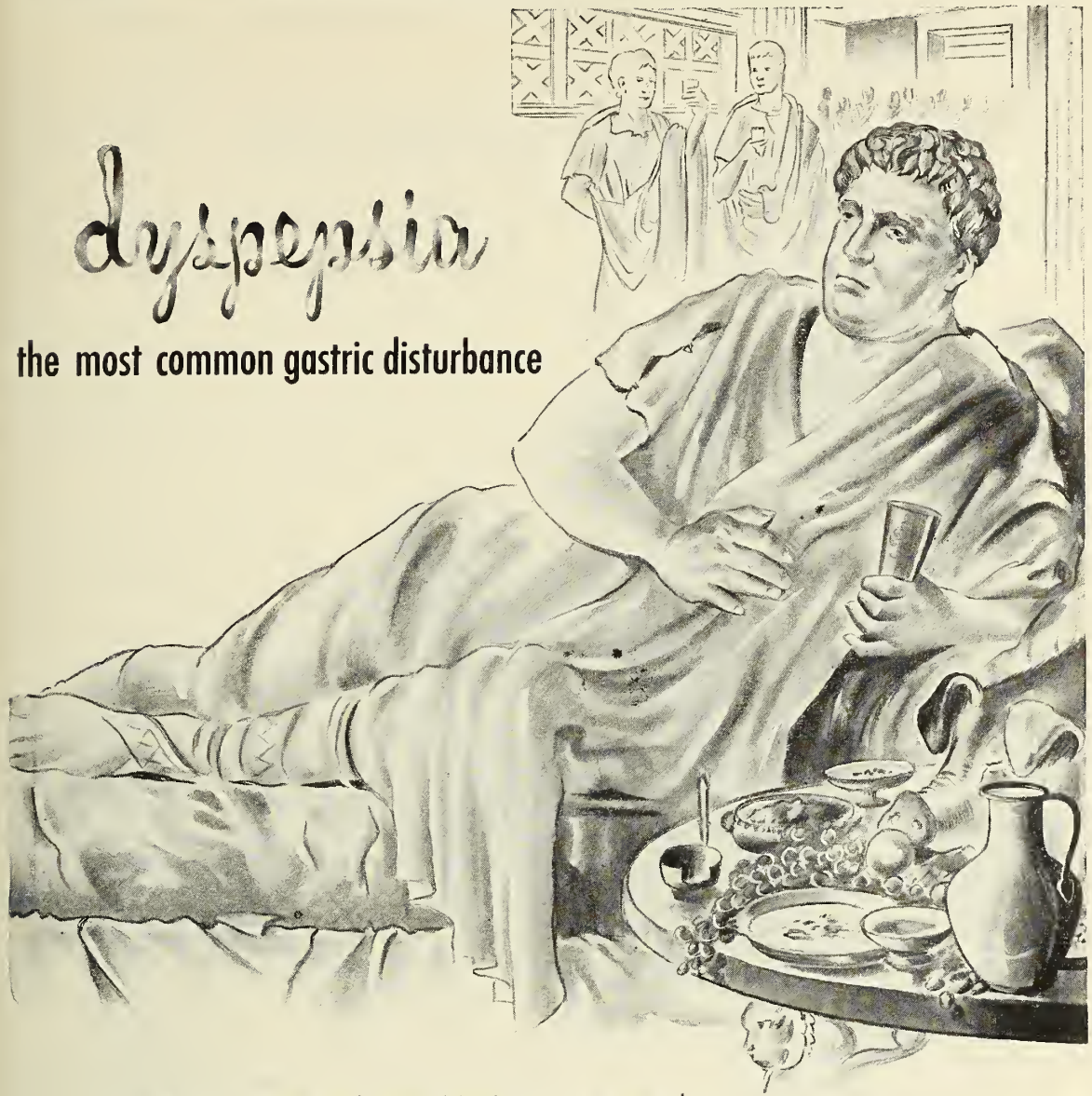
The executive secretary of the Indiana Cancer Society told of tentative plans for requesting the president of the state association to appoint one board member from each of the councilor districts. He was requested to put his proposal in writing so that it can be considered by the Executive Committee at its meeting on April 3 and the Council on April 4.

Veterans Affairs

Following explanation of the chairman of the Committee on Veterans Affairs and Rehabilitation that the contract with the Veterans Administration had been cancelled, on motion of Drs. Nafe and Hauss the Veterans Committee was authorized to negotiate a new contract which will stipulate

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increased fees for x-ray therapy and pneumothorax treatments. He reported that 80 per cent of the bed space in veterans hospitals is being used for the care of veterans whose illnesses have no direct relationship to military service, while, on the other hand, sufficient Veterans Administration funds are not available to give adequate medical care to veterans under the Home Town Care program.

The Journal

Report on advertising:

Additions	$854.55
Decreases	434.12
Total increase for year	$420.43

Classification of professional cards. Letter was received from the Indianapolis Medical Society saying that the Ethics Committee of that society felt that "it could not accept the responsibility of distinguishing among its members as to the various specialties."

There being no further business, the meeting was adjourned.

COMMITTEE ON PUBLICITY

January 30, 1948

Present: Homer G. Hamer, M.D., chairman; James O. Ritchey, M.D.; Marlow W. Manion, M.D.; Cleon A. Nafe, M.D., and Ray E. Smith, executive secretary.

The following "Hints on Health" columns were approved:

Week of March 1, 1948—"Rickets."

Week of March 8, 1948—"The Sciatic Nerve."

The following news release on the Secretaries' Conference to be held Sunday, February 15, 1948, for mailing to all papers in the state February 9, 1948, was approved:

"Medical Problems Will Be Discussed at Meeting Sunday."

Two special news releases pertaining to awarding of a medical school scholarship and a nursing school scholarship, one for all Indianapolis newspapers and the other for papers in Elkhart, Goshen, Mishawaka and South Bend, were approved.

Statement on medical care of veterans in Indiana, prepared by the chairman of the Committee on Veterans Affairs and Rehabilitation, approved by telephone before its release to the press, was noted.

Speakers supplied:

January 22, 1948—Regional conference, Licensed Nursing Homes, Indianapolis.

January 29, 1948—Kiwanis Club, Madison.

February 17, 1948—George Washington Club, Indianapolis.

The history of the Committee on Publicity, as prepared by the chairman, for the "History of the Indiana State Medical Association," to be published by the Committee on Centennial Celebration and History, was approved.

COMMITTEE ON PUBLICITY

February 13, 1948

Present: James O. Ritchey, M.D.; Marlow W. Manion, M.D.; Cleon A. Nafe, M.D., and Ray E. Smith, executive secretary.

The following "Hints on Health" releases were approved:

Week of March 15, 1948—"Chronic Alcoholism."

Week of March 22, 1948—"Mumps."

Week of March 29, 1948—"Treatment of Burns."

A radio script entitled, "Doctor's Day," submitted by the chairman of the Radio Committee of the Woman's Auxiliary to the state association, was disapproved.

An Associated Press clipping with a Salt Lake City dateline, carrying the heading, "Streptomycin Helps Correct Voice Defects," was reviewed. The secretary was instructed to inform the physician who submitted the article that the committee agreed with him that it conveys a false implication but little, if anything, would be gained by protesting to the local paper which printed it.

The committee expressed the view that it is imprudent for physicians to list themselves as specialists in telephone books and other lay publications, and that such classification should be confined to medical publications and directories. However, the committee believed that this is a policy which each county medical society should decide for itself. The secretary was directed to send the committee's conviction to the county society secretary who had raised the question.

Suggested speakers for the Fifth District Medical Society meeting at the Grant Hotel, near Greencastle, June 2, to cover the subject of "Hypertension," were agreed upon and the secretary was instructed to forward the names to the society president, in answer to his request.

LOCAL SOCIETY REPORTS

COUNTY MEDICAL SOCIETY OFFICERS

KNOX COUNTY MEDICAL SOCIETY

President, M. M. McDowell, Vincennes,
Vice-President, Kenneth L. Shaffer, Vincennes,
Secretary-Treasurer, Meredith B. Gossard, Vincennes.

MORGAN COUNTY MEDICAL SOCIETY

President, R. W. VanBokkelen, Mooresville,
Secretary-Treasurer, James Farr, Martinsville.

VIGO COUNTY MEDICAL SOCIETY

President, James V. Richart, Terre Haute,
Vice-President, Harold B. Fuqua, Terre Haute,
Secretary-Treasurer, Albert M. Mitchell, Terre Haute.

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W. E. KENNEDY, PRESIDENT

Medical Staff
M. C. Pitkin, M.D., Director
J. H. Grimes, Associate

Adams County Medical Society met at the Berne Community Auditorium on February tenth for a dinner meeting. The speaker was Dr. Lawerence Shinabery, of Fort Wayne, whose subject was "Health Legislation Bills in Congress in Washington." Twenty-two members attended the meeting.

* * *

Elkhart County Medical Society members held a meeting on March fourth at the Empire Room, Hotel Elkhart. The forty-nine members present heard a paper on "Neoplasms of the Lower Respiratory Tract," by Paul H. Holinger, M.D., of the College of Medicine, University of Illinois. This paper was illustrated by colored slides and colored movies taken by Doctor Holinger.

* * *

Fort Wayne (Allen County) Medical Society held a meeting on February seventeenth at the St. Joseph Hospital. At another meeting on March second they met at the Fort Wayne Chamber of Commerce, and heard a talk on "Postgraduate Education," by Dr. John D. Van Nuys, Dean of the Indiana University School of Medicine. Sixty-three members attended this meeting.

* * *

Greene County Medical Society members met at the Freeman-Greene County Hospital, at Linton, on February twelfth. A new fracture table was presented at this meeting, with an explanation and demonstration. Thirteen members were present.

* * *

Hamilton County Medical Society met at Westfield on February tenth. Dr. J. O. Ritchey, of Indianapolis, spoke on "Medical Treatment of Thyroid Disease." Twenty-two members and guests attended the meeting.

* * *

Huntington County Medical Society met at the Hotel LaFontaine, in Huntington, on March second. Ten members were present.

* * *

Kosciusko County Medical Society members met at Warsaw on February third. Dr. Milo Miller, of South Bend, spoke to the twelve members in attendance on "Treatment of Allergic States."

At another meeting on March second, Dr. C. C. Dubois, of Warsaw, spoke on "The Cancer Control Program." There were eleven members at this meeting.

* * *

Madison County Medical Society members met on February sixteenth for a dinner meeting. The speaker was Dr. Charles A. Zeller, who discussed "Mental Health and Mental Hospital Situation in Indiana." Twenty-seven members were present.

* * *

Parke-Vermillion County Medical Society members met at the Vermillion County Hospital on February eighteenth. Dr. Robert E. Jewett and Mr. Albert Stump, both of Indianapolis, spoke on "Organizing a Hospital Staff." Twelve members attended the meeting.

St. Joseph County Medical Society held a meeting at the LaSalle Hotel, in South Bend, on February twenty-fifth, at which sixty-five members were present. The guest speaker was Dr. C. Wesley Eisele, of the University of Chicago, whose subject was "Brucellosis."

* * *

Tippecanoe County Medical Society members met at the Lincoln Lodge, in Lafayette, on February tenth. Robert S. Dinsmore, M.D., of Cleveland, spoke to the sixty-five members present on "Tumors of the Neck."

* * *

Vanderburgh County Medical Society members held a dinner meeting at the Hotel McCurdy, in Evansville, on February tenth. "Recent Advances in Surgery of the Peptic Ulcer" was the subject presented by Dr. R. Arnold Griswold, of Louisville. Eighty-seven members attended the meeting.

* * *

Vigo County Medical Society members held election of officers at a meeting on February tenth at St. Anthony's Hospital, in Terre Haute. Following a business session, the society was addressed by Dr. John A. Campbell, Indiana University School of Medicine. Thirty-five members attended the meeting.

WOMAN'S AUXILIARY to the Indiana State Medical Association

President—Mrs. A. W. Ratcliffe, Evansville.
President-elect—Mrs. William Morrison, Kokomo.
Corresponding Secretary—Mrs. J. W. MacDonald, Evansville.
Recording Secretary—Mrs. Truman Caylor, Bluffton.
Treasurer—Mrs. Wendell Kelly, Anderson.
Press and Publicity—Mrs. F. M. Gastineau, Indianapolis.

OUR GOAL

"Every Physician's Wife An Auxiliary Member"

FOR MEN ONLY OR WHAT PHYSICIANS SHOULD KNOW ABOUT THEIR WIVES

The above title is erroneous, misleading and probably will have no bearing on what is written in this article. But I have noticed that such a title attracts both men and women and I want everyone to read this. In the past year, as president of the Woman's Auxiliary to the Indiana State Medical Association, I have run the gamut of emotions from frustration and defeat to joy of accomplishment, and now that I am about to go out of office, I might as well finish with a bang and stick my neck completely out. So, pull up a chair, and let's talk some things over.

First, let me say that if you have an auxiliary to your county medical society and you are helping



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Our **ALCOHOLIC** treatment destroys the craving, restores the appetite and sleep, and rebuilds the physical and nervous condition of the patient. Liquors withdrawn gradually; no limit on the amount necessary to prevent or relieve delirium.

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them with their projects, using them to the utmost, meeting with them occasionally to talk things over, recognizing that they can be one of your biggest aids in public relations, legislation, etc., pat yourself on the back. But don't stop here. Read on, you might get some further ideas.

Recently in *Medical Economics* I read an article expressing surprise and concern because eight counties in an eastern state did not have a medical auxiliary. It's a good thing they did not look at the map of Indiana. We have only 29 organized auxiliaries covering 33 counties as this is written on March 1st. Six new auxiliaries are pending, two of which have been meeting for several years, but for some unexplained reason have not become members of the state and national auxiliary. There is, however, only *one county* in the whole state where we do not have a single member, as we have made a rather successful drive for members-at-large this year. We hope to clear that situation soon.

When I think of the opportunity you are missing, it baffles me that so many of you doctors just don't seem to give a darn whether you have an auxiliary or not. Over a period of years we have practically batted our brains out to get 29 auxiliaries. In times like these I'd think you would be looking around for all the organized help you can get. Instead, it is such a rare occasion that we get a request to come in and organize the wives that the shock is almost too much. Don't let that stop you, though; we practically fall over each other getting there.

Now let me give you a few tips. Who better can give you active assistance with legislation by becoming acquainted with legislators and writing them letters? Who can cover the women's clubs for you, becoming active in their health and health education projects and guarding your interests at all times? Who can work with your schools for better health programs, social hygiene information, authentic supplementary literature, such as *Hygeia* and use of radio programs and movies? Who can arrange public lectures or radio transcriptions on your local station? Who can help solve your nursing shortage? Who can work on projects and problems peculiar to your community in your interest? Who? *Your wives!*

Sure, your wife does a lot of this already. We know that. We also know from experience that the work she does as an individual becomes more important in the eyes of the public, if it carries the weight of the medical auxiliary and approval of the medical society. The medical auxiliary, local, state and national, is not a superficial, social organization. We are learning rapidly our place in the scheme of things to come and we are seriously educating ourselves to meet any demands, to be informed on fields where we can be of most service to the medical profession.

To be of most service we need all doctor's wives with us, fitting suggestions and ideas into their community. We need organized groups of doctor's wives working together in a friendly atmosphere, seriously and intellectually, though quietly, going about the business of further aid to the medical profession. We need their ideas and accomplishments reported to us so that others can do the same things. The auxiliary can be a clearing house for certain phases of your local public relations program. The state auxiliary is the clearing house for the counties and the national auxiliary is the clearing house for the states.

You belong to your county society, the Indiana State Medical Associaion and the American Medical Association. Does your wife belong to the organization whose very name, the Woman's Auxiliary, indicates its whole purpose—to help, aid, assist? She may be sitting right beside you as you read this. If so, why don't you say to her, "Look, dear, you belong to the PTA, the Federated clubs, a couple of bridge clubs and you work on all kinds of things, besides raising the children and keeping the house, but why don't you seriously consider a medical auxiliary? You might get more satisfaction out of it and do the medical profession a lot of good. I'll help you any way I can." Go on, say it, you won't be sorry.

Rebecca Ratcliffe, President.

Fourth Annual House of Delegates

The fourth annual House of Delegates of the Woman's Auxiliary to the Indiana State Medical Association will be held at the McCurdy Hotel in Evansville on April 27 and 28, 1948. Business will be transacted, reports of officers and chairmen of the state auxiliary and presidents of county auxiliaries will be heard and new officers will be elected and installed.

A dinner has been arranged for Tuesday evening in the Pompeian Room of the McCurdy Hotel. Arrangements are being made by the Woman's Auxiliary to the Vanderburgh County Medical Society. All persons attending the House of Delegates are invited, as well as members in neighboring counties. Immediately following the dinner there will be a meeting of the Board. Bridge is being arranged by Medical-Mrs. of Evansville for delegates and guests.

On Wednesday the House of Delegates convenes promptly at 10:00 A.M. in the Gold Room of the McCurdy. Lunch will be served at noon and the afternoon session will begin at 1:00 P.M. Arrangements are being made for several speakers at intervals throughout the day. This session will be thrown open to interested members or guests who wish to listen to the reports and business to gain a wider view of auxiliary activities. It must be understood, of course, that only state officers and chairmen, presidents and presidents-elect of county auxiliaries and accredited delegates may take part in the business of the meeting.



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THE INDIANA STATE MEDICAL ASSOCIATION

NINETY-NINTH ANNUAL SESSION—INDIANAPOLIS, OCTOBER 26, 27 and 28, 1948

OFFICERS FOR 1948

President—Cleon A. Nafe, M.D., 822 Hume Mansur Bldg., Indianapolis 4.

President-elect—Augustus P. Hauss, M.D., 212 Elsby Bldg., New Albany.

Treasurer—A. F. Weyerbacher, M.D., 709 Hume Mansur Bldg., Indianapolis.

Executive Secretary—Mr. Ray E. Smith, 1021 Hume Mansur Bldg., Indianapolis

Assistant Executive Secretary — Miss Lucille Kribs, 1021 Hume Mansur Bldg., Indianapolis.

SECTION OFFICERS

Section on Surgery:

Chairman, William N. Wishard, Jr., M.D., Indianapolis.

Vice-chairman, Harold D. Caylor, M.D., Bluffton.

Secretary, Hawthorne C. Wallace, M.D., Crawfordsville.

Section on Medicine:

Chairman, M. E. Glock, M.D., Fort Wayne.

Vice-Chairman, Stanton L. Bryan, M.D., Evansville.

Secretary, Paul J. Fouts, M.D., Indianapolis.

Section on Ophthalmology and Otolaryngology:

Chairman, R. J. McQuiston, M.D., Indianapolis.

Vice-chairman, Dewey D. Yoder, M.D., Columbus.

Secretary, Richard P. Good, M.D., Kokomo.

Section on Anesthesia:

Chairman, William H. Lane, M.D., South Bend.

Vice-chairman, Edward F. Bloemker, M.D., Indianapolis.

Secretary, William B. Adams, M.D., Muncie.

Section on General Practice:

Chairman, Eugene F. Boggs, M.D., Indianapolis.

Vice-chairman, William R. Tindall, M.D., Shelbyville.

Secretary, Lester D. Bibler, M.D., Indianapolis.

Section on Obstetrics and Gynecology:

Chairman, Dudley Pfaff, M.D., Indianapolis.

Vice-chairman, David A. Bickel, M.D., South Bend.

Secretary, E. L. Engel, M.D., Evansville.

DELEGATES TO THE A.M.A.

For One Year (terms expire Dec. 31, 1948): H. G. Hamer, M.D., Indianapolis, and A. S. Giordano, M.D., South Bend. Alternates: Karl R. Ruddell, M.D., Indianapolis, and William H. Howard, M.D., Hammond.

For Two Years (terms expire Dec. 31, 1949): F. S. Crockett, M.D., Lafayette, and William M. Cockrum, M.D., Evansville. Alternates: A. M. Mitchell, M.D., Terre Haute, and Norman M. Beatty, M.D., Indianapolis.

COUNCILORS

District	Councilor	Term Expires
1	Herman T. Combs, Evansville	Dec. 31, 1950
2	James H. Crowder, Sullivan	Dec. 31, 1948
3	William H. Garner, New Albany	Dec. 31, 1949
4	O. A. Turner, Madison	Dec. 31, 1950
5	A. M. Mitchell, Terre Haute	Dec. 31, 1948
6	W. U. Kennedy, New Castle	Dec. 31, 1949
7	Cyrus J. Clark, Indianapolis	Dec. 31, 1950
8	E. H. Clauser, Muncie	Dec. 31, 1948
9	Wemple Dodds, Crawfordsville	Dec. 31, 1949
10	William H. Howard, Hammond	Dec. 31, 1950
11	C. S. Black, Warren	Dec. 31, 1948
12	Paul A. Garber, South Whitley	Dec. 31, 1949
13	Alfred Ellison (Chairman), South Bend	Dec. 31, 1950

1947-1948 DISTRICT MEDICAL SOCIETY OFFICERS

District	President	Secretary	Place and date of meeting
1	George W. Willison, M.D., Evansville	Williard T. Barnhardt, M.D., Princeton	Evansville, May 27
2	W. C. Reed, M.D., Bloomington	J. S. Brown, M.D., Carlisle	Bloomington, May 20
3	Keith Hammond, M.D., Paoli	B. E. Sugarman, M.D., French Lick	French Lick, May 26
4	George S. Row, M. D., Osgood	Lloyd W. Hisrich, M.D., Batesville	Batesville, May 19
5	Dick J. Steele, M.D., Greencastle	M. C. Topping, M.D., Terre Haute	Greencastle, June 2
6	Will A. Thompson, M.D., Liberty	Robert W. Kuhn, M.D., Wilkinson	Shelbyville, May 12
7	Harry Murphy, M.D., Franklin	Donald E. Wood, M.D., Indianapolis	Indianapolis, May 4
8	Frederick B. Wishard, M.D., Anderson	M. A. Austin, M.D., Anderson	Anderson, May 19
9	Milton W. Erdel, M.D., Frankfort	Claude D. Holmes, M.D., Frankfort	Frankfort, May 13
10	Neal Davis, M.D., Lowell	Frank G. Sink, M.D., Remington	Whiting, May 5
11	Stephen D. Malouf, M.D., Peru	O. G. Brubaker, M.D., North Manchester	Wabash, May 19
12	G. T. Bowers, M.D., Fort Wayne	Karl M. Beierlein, M.D., Fort Wayne	Fort Wayne, Apr. 6
13	A. A. Thompson, M.D., Tyner	O. E. Wilson, M.D., Elkhart	South Bend, Nov. 10

INFORMATION FOR CONTRIBUTORS TO THE JOURNAL

All articles must be typewritten, double-spaced, on one side of white paper, with margins of at least one inch. Photographs should be printed on glossy paper. Negatives are not acceptable.

Only a limited number of illustrations can be used with each original article. If an excessive number are submitted for publication, the cost of extra illustrations must be borne by the author.

Contributors are responsible for all statements made in their articles. The editor and editorial board members may not be in agreement with various views expressed by authors, but it is desired to allow authors as great latitude as possible. However, the right is reserved to reduce in length or reject any article.

Articles are accepted for publication only with the understanding that they are submitted for exclusive publication in THE JOURNAL of the Indiana State Medical Association. All communications regarding advertising and subscriptions should be sent to THE JOURNAL of the Indiana State Medical Association, 1017 Hume Mansur Building, Indianapolis 4, Indiana. Communications dealing with editorial matters should be sent to E. M. Shanklin, M.D., Editor, 5141 Hohman Avenue, Hammond, Indiana.

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

Issued Monthly under Direction of the Council

OFFICE OF PUBLICATION: 1017 Hume Mansur Bldg., INDIANAPOLIS 4, INDIANA

VOLUME 41 MAY, 1948 NUMBER 5

VASCULAR CHANGES OF THE EYE ASSOCIATED WITH DIABETES MELLITUS*

CORLEY B. MCFARLAND, M.D.‡

SOUTH BEND

DURING the past decade clinicopathologic reports have appeared in the literature which lead one to consider the fact that diabetes mellitus produced clinical and pathologic changes in the blood vessels which might be considered particular to that disease. Ever since Volhard[1] stated in 1921 that he had never seen a patient suffering from diabetic retinitis who did not present some alteration due to hypertension, a controversy has existed as to whether diabetes did or did not produce a particular architectural change.

Nettleship,[2] as early as 1888, noted that some diabetic patients presented unusual dilatation of the retinal veins. Of more recent reference, Gray,[3] in 1931, noted the beaded appearance of the retinal veins; Braun[4] mentioned the presence of expansions and varicosities of the veins; and Mylius[5] thought that diabetic retinopathy was due to stasis or blocking of the retinal veins.

Bonnet and Bonamour[6] are credited[7] with the first description "devoted to the more characteristic changes in retinal vessels of diabetes." They described alterations present in the veins, and said these consisted of irregularity in caliber, segmented dilatations, diverticula, and white sheathing of the veins.

Klien,[8] in a histopathologic study of retinitis proliferans published in 1938, noted two types of change. The second type is characterized by "a primary formation of new blood vessels with secondary production of a scaffolding of delicate connective tissue." She believed the second type was due to "a slow circulatory impairment due to degenerative vascular disease and formation of new compensating channels, with or without hemorrhage at first." She stated that this type was often found occurring concomitantly with diabetes.

In 1939 Fehrmann[9] noted particular histologic changes in rubeosis iridis diabetica, which he considered diagnostic. These were based on case studies of diabetic and nondiabetic rubeosis of the iris. His differentiations were as follows: Nondiabetic rubeosis was marked by larger vessels which ran in connective tissue attached to the anterior limiting layer, and which at times extended beyond the pupillary margin. This latter observation was not noted in the diabetic type. Connective tissue was present in the stroma of the iris in the nondiabetic type, while in the diabetic type this was not the case. Scar tissue was present in the iris angle in the nondiabetic form, whereas in the diabetic rubeosis the synechiae are marked by the

*Presented at the Section on Ophthalmology and Otolaryngology at the annual session of the Indiana State Medical Association, at French Lick, on October 29, 1947.

‡ Department of Ophthalmology, The South Bend Clinic.

1. Volhard, F.: Verhandl. d. deutsch. Gesellsch. f. inn. Med. 33:335, 1921.
2. Nettleship, E.: Tr. Ophth. Soc. U. Kingdom, 8:159, 1888.
3. Gray, W.: Tr. Ophth. Soc. U. Kingdom, 51:108, 1931.
4. Braun, R.: Graefe's Arch, 136:256, 1936.
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6. Bonnet and Bonamour: Bull. Soc. Ophth. Paris, 5:367, 1938.
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presence of capillaries. Fralick,[10] in a study of the same type of material, was unable to substantiate these findings, and concluded the only common finding was "the obvious disturbance to the degree that the rubeosis iridis and hemorrhagic glaucoma developed."

O'Brien and Allen[11] in 1940 described 21 cases of retinitis and retinal varices seen among diabetics, and noted that "varices of the retina are uncommon, but are seen occasionally in patients with retinitis of diabetes, and more rarely in those with arteriosclerotic retinitis."

In 1940 Agatston,[12] in a histopathologic study of 25 retinae from patients who had suffered from diabetes, concluded that the changes were more particularly evident in the veins and capillaries.

Gibson and Smith[13] in 1941 confirmed the presence of retinal phlebosclerosis noted by O'Brien and Allen,[11] and mentioned the increased incidence of venous disease associated with diabetes.

Ballantyne[14] first published the results of his investigations in 1942, and again noted the changes in the veins of persons suffering from diabetes. According to Ballantyne, one-third of his diabetic patients presented dilatation of the veins as the first ocular sign of diabetes. This dilatation is not of uniform distribution, but is marked by the involvement of particular venous branches which may have increased tortuosity, and the vessel may form loops and coils upon itself. This picture is evidence of early stasis in the veins of the retina. The engorgement is different from that seen in venous thrombosis, in that the distribution is so erratic, while postthrombotic dilatation is either generalized or confined to the affected branch.

The vessels of the smallest caliber present changes which Ballantyne and Loewenstein[7] referred to as "the so-called punctate hemorrhages of diabetic retinitis," and gave reasons for the belief that at least some of them—small, round, and situated on or near the small perimacular vessels—were actually capillary aneurysms. Further investigation has shown this to be correct, and histologically it is possible to differentiate between punctate hemorrhages and microaneurysms. The description given is that these aneurysms are not much larger than perimacular vascular twigs (50-60 microns); in appearance they are perfectly round, and their globular form is sometimes indicated by the presence of a bright central reflex.

These microaneurysms are located beneath the principal vessels of the retina, and usually are situated in the inner nuclear layer. They are globular distentions of the capillaries, which form a link between the first capillary plexus in the ganglion cell layer and the second capillary plexus situated at the outer boundary of the inner nuclear layer.

Friedenwald,[15] in discussing these aneurysmal sacs, admits their presence, and mentions the probability that the process begins as a break in the capillary wall which produces a slow leak of corpuscles. This hole in the vessel wall, showing little tendency to heal, is repaired by endothelial cells which grow out around the mass of extravasated blood cells, forming a sacular aneurysm.

Microaneurysms have been noted among the hypertensive fundus changes and also in venous thrombosis. The change here, though, is marked by a more general distribution over the fundus. The diabetic fundus is characterized by the small number of microaneurysms usually in the central area, either alone or with petechial hemorrhages.

Ballantyne has demonstrated microscopic swelling of the endothelial lining cells of the capillaries and pre-capillaries, which he believes precedes the aneurysmal formations. This is followed by fatty granules being deposited in the vessel wall with a resultant obstruction to the flow of blood within the lumen of the vessel. With the dilatation comes phlebosclerosis which involves vessels of varying size. This course is different from that seen in the hypertensive change where the architectural modification is primarily on the arteriolar side of the blood stream.

These changes would indicate a lack of integrity of the capillary and venous wall in diabetics. Clinically, such is borne out by the capillary fragility test; and Hanum[16] demonstrated the increased fragility of the capillaries in diabetic patients in 1939. This observation has been concurred in by Friedenwald.[15] In my own personal experience, drawn from 83 diabetics who presented retinal pathology of a diabetic character, 92 per cent had increased capillary fragility.

Investigation of the changes associated with diabetes indicates that the initial alteration occurs in the capillaries and veins. Studies of the histopathologic changes in rubeosis of the iris and retinitis proliferans reveal that these processes are probably initiated as vascular proliferations. The inciting element is obscure, but the further course, based on the various vascular patterns, is probably dependent on the localized metabolic requirement of the affected tissue.

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STYES: THE ROLE OF NUTRITION IN ETIOLOGY AND TREATMENT

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STYES and chalazia present problems that are frequently met by the general practitioner. Only the more persistent of these cases are seen by either the pediatrician or the oculist. In surveying the medical books and periodicals, we could scarcely realize that such a well-known and annoying condition as a stye could be so inadequately covered by the literature.

A stye or hordeolum, by definition, is an infection of a Moll or Zeiss gland of the eyelid, usually by the staphylococcus.[1] A chalazion represents an obstruction in the drainage duct of a meibomian gland. If the duct is simply occluded, followed by mild swelling, redness and tenderness, it is termed a chalazion; if there is actual infection in this area, it is known as a hordeolum of the meibomian gland, or Hordeolum Internum.[1] We wish to point out that the etiologic agent in both conditions is usually the same.

The following traditional remedies are listed: A. Refraction;[2] B. Local application of yellow oxide of mercury and hot packs;[1] C. Cod liver oil or vitamin A preparations;[2-3] D. Iron therapy in cases of anemia;[1] E. Autogenous vaccine or staphylococcic vaccine;[1] F. Attention to foci of infection, viz., tonsils, sinuses, etc.;[1] G. Regular diet;[1-2-3] H. Allergy studies;[3] I. Cilia removal;[4] J. Massage;[5] K. Stannous compounds; L. Chemotherapy;[6] M. X-ray.[7] We fail to find any rational explanation of the cause of these recurrent minor infections, nor are we able to find any well-planned program for the methodical treatment of these afflictions. Each author suggests one or more of the above as the proper approach.

Perhaps we should try to rationalize the prevailing methods of treatment. It is admitted that it is not known how refractive errors may be responsible for infection, but it is supposed that the blepharospasm induced by eyestrain, even though not marked, may occlude the mouths of the glands and allow bacteria to multiply in their ducts and alveoli.[1] This is reason enough for Gifford to state in his "Ocular Therapeutics" that refraction coupled with the use of yellow oxide of mercury is the first procedure to try.[1] There is also a possibility that refractive errors might occasion rubbing of the eyelids, with a resultant contamination of the duct mouths by the fingers. The rationale for the use of yellow oxide of mercury is not given, but it is presumed that it is an effort to prevent spread of infection to contiguous areas. The use of vitamin A is advised in cases that are obviously anemia, or are recovering from general infection.[1] Iron is suggested only in cases of true anemias that have been proven by an internist.[1] The reasons for the use of staphylococcic and autogeneous vaccines is self-explanatory. The attention to foci of infection is obvious, as are most of the other suggestions made above. The use of penicillin has been recorded and reported upon.[6] We wish to warn against its use because of the ease of sensitizing the patient and thus preventing its use in more serious cases. The use of sulfa drugs and ointments has not been efficacious in our hands, either as therapeutic or prophylactic agents in these cases.

The very number and diversity of the listed explanations and remedies is proof to us that none is adequate. We wish to offer the following approach to the problem:

We believe that a combination of lowered humoral and local tissue immunity, plus extraneous incidents, such as mechanical and chemical irritation, are the basic etiological factors in the production of bacterial infections in the glands of the lid. Recent papers on nutrition have verified in our minds what we long have believed about this subject.

It has been common observation that styes occur more frequently in the lower economic levels, but that they are not rare in the higher economic brackets. We have analyzed the diet of children with styes and find that when styes occur,

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[1] Gifford, S. R.: A Hand Book of Ocular Therapeutics. Philadelphia, Lea and Fibiger, 1942, pp. 198-9.

[2] Elder, A. T.: Chronic Blepharitis in Children: Treatment with aniline dye compound. Brit. M. J. 2:185-187, August 10, 1940.

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the diet, regardless of economics, is characterized by a high carbohydrate, low protein content. When styes occur in children of the so-called better families, one usually gets a history of a diet consisting largely of milk and carbohydrates. This is not to imply that milk per se is a cause of styes, but a fondness for milk often seems to call for starches and sweets and prevents the ingestion of other foodstuffs. Milk is the source of a protein of excellent quality, but its bulkiness and the frequently associated cereals, starches, and sweets provide a diet very low in total protein. Milk, furthermore, is notoriously lacking in iron.

Children in lower economic levels usually get a high carbohydrate diet and the small amount of protein included is of very poor nutritional quality. Unpublished reports on children living on the islands off North Carolina show an extremely high incidence of marginal blepharitis and styes. These children live on highly refined starches and grains with very little protein of animal origin.

Hypoproteinosis has been shown experimentally to reduce the ability to manufacture gamma globulin.[8] The ability to synthesize antibody in the well-fed individual is about tenfold the capacity of one with hypoproteinosis.[9]

Apparently egg and meat protein, and to a somewhat lesser degree milk protein, are the most efficient from an immunological standpoint.[10]

There is ample clinical and experimental evidence that insufficiency of protein makes children more susceptible to a large number of disease processes, including styes.

It is amazing that the value of protein from the standpoint of susceptibility to infections and resistance to disease should have been so long relegated to the background.[11] The popular and spectacular literature on vitamins and minerals, particularly calcium, has detracted attention from the all-important proteins. Only recently has it been pointed out that protein is the chief element in antibody, enzyme, and leukocytic activity. There is a great deal of experimental evidence showing that the ability to resist infections is very markedly impaired with a prolonged inadequate protein diet. Furthermore, it is also shown that the ability to produce antibodies by artificial means with the use of vaccines and other antigens is reduced.[12] Moderate degrees of protein insufficiency largely impairs the humoral defense apparatus; severe degrees of insufficiency also affects the phagocytic mechanisms.[10] This is contrary to the mechanism in vitamin insufficiency which produces a compensatory increase in phagocytic activity, even though there is a lowering of bactericidic activity.[10]

The administration of iron in the treatment of styes is a time-honored procedure, but it is well known that it frequently has little effect on the course of styes. Experimental evidence now at hand explains this failure. It is found[13] that a diet low in protein and completely adequate in all other respects resulted in a low-grade chronic anemia. The red blood cells consist largely of protein, and the anemia produced by protein insufficiency can be remedied by the allowance of adequate dietary protein without changing the amounts of calories, minerals and vitamins consumed. An increase in either the iron or vitamin intake of animals on a low-protein diet does not materially increase the hemoglobin formation.

We feel that in view of our own clinical experience and a large volume of experimental evidence that successful treatment of styes is wholly impossible without careful attention to the patient's dietary and nutritional needs. It must be pointed out that the total caloric requirements of a preschool child are much lower than is commonly realized and that these children frequently are unable to consume a high protein diet because they are permitted, or forced, to consume a quart of milk daily.

The following dietary regime is suggested:

1. No food between meals, except fruit.
2. Limit milk intake to one pint of milk daily.
3. The child should not be expected to take three large meals daily. The main course of the one or two meals which are accepted should consist of one of the nutritionally adequate proteins, such as meat, eggs or cheese. Cereals for breakfast should be prohibited or given only after the consumption of an egg or portion of meat.
4. Desserts are to be prohibited, so that the child will not "save room" for them.

CONCLUSIONS

(1) The first approach to the therapy of styes and kindred lid infections is the institution of a proper dietary regime, namely, well balanced protein intake.

(2) Mineral and vitamin administration are adjunctive measures in therapy and prophylaxis.

(3) Local application of ointments, tonsillectomy, search for foci of infection, and refraction are procedures that should be secondary to proper nutritional care.

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THE CROSS CYLINDER IN REFRACTION*

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DUE to the limitation of time I will not be able to discuss completely the cross cylinder and its uses, but I hope that in the time available I can show one way of using it which has worked better for me than any other.

Description: The cross cylinder is a lens composed of two cylinders of equal power but of opposite sign, with their axes crossed at 90 degrees to each other. The cylinders commonly used are plus and minus fifty, plus and minus twenty-five, and plus and minus twelve hundredths diopter. The axis of the minus cylinder is marked with diamond scratches in the usual manner and with a red dot beside each scratch. The plus cylinder axis is marked with diamond scratches and white dots. Midway between a red and white dot the handle joins the rim. Thus the handle is at 45 degrees to each cylinder axis. By rotating the handle between thumb and forefinger the axes of the two cylinders are reversed.

Uses: The cross cylinder is used, first, to test for the strength of the cylinder and, second, to locate the axis of the cylinder.

Testing for Strength: Usually, the cross cylinder is used while the patient fixes his gaze on a letter of the Snellen types. It is my experience that an astigmatic dial is a better fixation object while testing for strength of the cylinder and that fogging is essential.

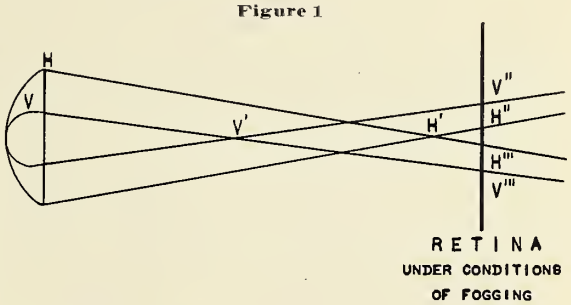
First, we will review briefly the conditions which exist in an astigmatic eye and why fogging is essential. In Figure 1, H represents the power of the horizontal meridian of the eye. Light rays passing through the horizontal meridian focus at H′ and strike the retina at H″H‴. A small point of light at infinity will produce an image through the horizontal meridian the width of H″H‴.

V represents the vertical meridian, its rays focus at V′ and image on the retina at V″V‴ where an image is produced with a length of V″V‴.

It is seen then that the image produced through both meridians at once will be distorted in both directions, but more so vertically. The resultant image of a small point of light will be a vertical streak.

On the astigmatic dial the lines may be considered as many points similarly distorted. Those points lying in the horizontal line blur into the surrounding white area, mixing white and black to produce grey. Those on the vertical line mix black on black to produce black. The vertical line of an astigmatic dial therefore will appear black if the eye is fogged and the greatest convexity is vertical, as in Figure 1.

Figure 1



Fogging is essential because if the retina occupied a position midway between H′ and V′ both meridians produce equal distortion and no difference in blackness of the lines exists. If the retina were anterior to V′ the horizontal meridian would produce the greater degree of distortion and the blackest line would be horizontal. If the foci were permitted posterior to the retina, as with excessive minus lenses, the ciliary body would contract and relax at liberty, changing the black line from horizontal to vertical and back again, resulting in complete confusion. If fogged with excessive plus sphere in hyperopes or insufficient minus sphere in myopes, contraction of the ciliary muscle reduces visual acuity, therefore every effort is made toward relaxation of accommodation. Without fogging, an astigmatic dial is useless.

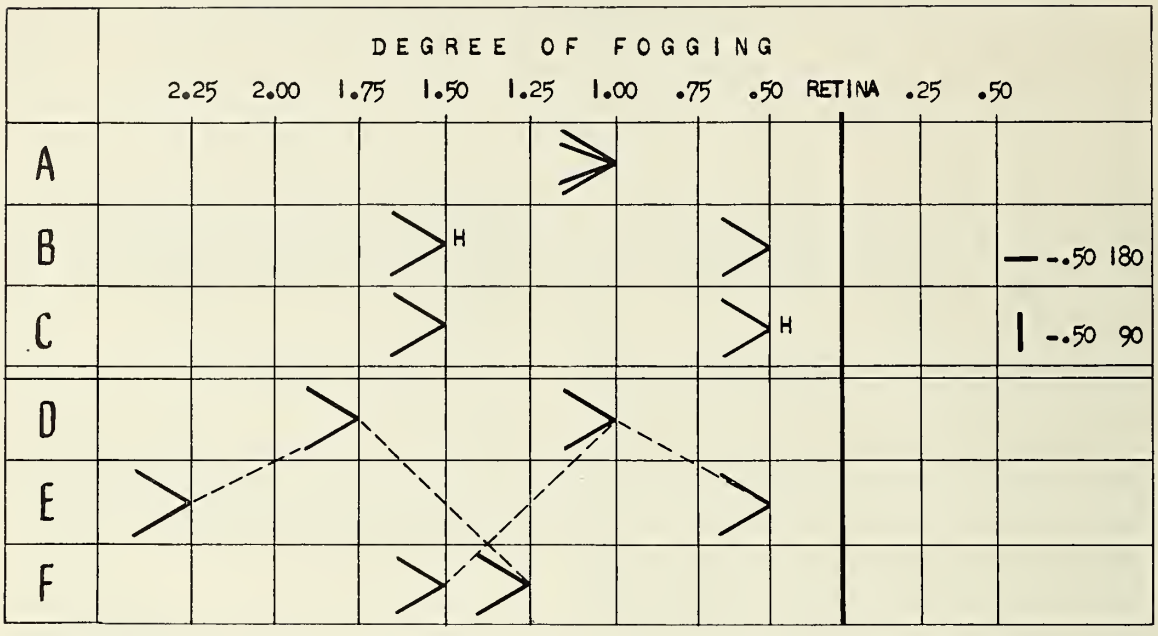
To arrive at the proper degree of fogging, record uncorrected vision, then assume that hyperopia exists. Place plus 1.50 sphere in the trial frame and again check the vision. Increase or decrease the plus sphere until vision is 20/70. The proper degree of fogging exists when vision is reduced to 20/70 by plus spheres. The hyperope of plus 2.00 may require plus 3.50 to reduce visual acuity to 20/70. A myope of minus 2.00 may require minus .50 to produce this visual acuity.

Attention is then directed to the astigmatic dial and the question is asked, "Where is the blackest line?"

The question is answered by one of two responses: (1) The patient indicates the direction of a line which appears blacker than the others; (2) The patient states that all lines are identical and that no difference exists between any of the lines.

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Figure 2



If the first type of response is given the direction of the blackest line indicates:

1. That astigmatism exists.
2. The approximate axis of one principle meridian.
3. The principle meridian having the greatest convexity (as in V of Figure 1).

Knowing these three facts, progress toward correction can be made. A minus cylinder is placed with axis at 90 degrees to the blackest line. I prefer to use minus cylinders and I am certain that all who follow this procedure will agree that more satisfactory results follow when minus cylinders are used. The reason for this is when minus cylinders are placed with axis at 90 degrees to the black line on the dial, the convexity of the more convex meridian is reduced, allowing the more anterior focus to fall closer to the retina, thus improving vision and encouraging the attention of the patient. On the other hand, if plus cylinders are used, with axis parallel to the black line, fogging is increased with each step and the patient's attention is repeatedly distracted to inform the examiner that vision is becoming progressively worse. As long as each step improves vision, the test progresses smoothly, the patient's interest and attention are keen, and unnecessary interruptions are avoided.

If maximum convexity is vertical, the black line is vertical, and the minus cylinder axis (being 90 degrees away from its meridian of greatest power) will be horizontal.

Minus cylinders are increased .50 diopters at a time until the patient reports that the lines are all equally black, or that the horizontal line has become blacker. If the latter occurs, reduce the minus cylinder until the lines are equally black.

The response of the two patients is now exactly alike. Both state that the lines of the dial are equally black.

The question appears in the examiner's mind, "Is the patient free of astigmatism or is he too dull to observe a difference in blackness of the lines?"

The question may be answered by creating or by exaggerating the astigmatism with a cross cylinder. The plus element of the cross cylinder may be disregarded completely. The cross cylinder may be thought of as being only a minus cylinder.

If no astigmatism exists (Figure 2, A): When no difference in blackness is noted in the lines of the astigmatic dial, always check the visual acuity and, if better than 20/40, increase the fogging. Sometimes, due to relaxation of accommodation, one focal line will recede posterior to the retina, leaving both meridians equally distorted. The minus element placed in one principal meridian will produce a black line on the astigmatic dial in that same meridian. First the plus and minus .50 is used and the minus element is placed over the horizontal meridian (Figure 2, B). The focal interval between the two foci is 1 diopter. With the fogging which exists, one focus is so far forward away from the retina that its image is very dim or practically invisible, while the other is closer to the retina and is quite black. The contrast is extreme and the black line is readily detected. If the handle of the cross cylinder is revolved between thumb and finger, the minus element is quickly flipped to the vertical meridian and a quick contrast is again produced, but this time the black line is vertical (Figure 2, C). Seldom does this test fail to produce the expected reply and the patient learns what he is expected to see.

The test is repeated with a plus and minus .25 cross cylinder in the same manner, the blackest line

always occupying the same position as the minus element of the cross cylinder. The focal interval produced is .50 diopter and again produces an extreme contrast. After experiencing the test with a plus and minus .50 the contrast in blackness is readily noted with a plus and minus .25. The test is repeated a third time with a plus and minus .12, but the contrast is relatively slight and if the patient is first challenged by a question such as "The difference now is very slight but are you able to detect the blacker line?", a reliable answer seldom fails to follow.

When no astigmatism exists, the minus element of the cross cylinder will produce a black line on the astigmatic dial parallel to its axis.

The three cross cylinders should always be used, starting with the plus and minus .50. If an attempt is made to short-cut by eliminating one of them, the very dull patients may not see the contrast produced by a plus and minus .25 and the average patients may be left with their cylinder improperly corrected by .25 diopter.

If astigmatism exists: The dull patient, who does not recognize the difference in blackness of the lines, is rather easily taught to observe more keenly.

Assume that he has .75 diopter of astigmatism (Figure 2, D). The minus element of the plus and minus .50 cross cylinder in one position will increase the astigmatic interval, making one line invisible and the other blacker (Figure 2, E). In the second position both foci are very close together and little or no difference will be detected.

Minus cylinders are used to make the lines equally black and if none is recognized in one meridian but is recognized in the other, place the minus cylinder at 90 degrees to the meridian in which the black line appears. Continue with the plus and minus .50 cross cylinder and continue adding minus cylinders in the trial frame until a black line appears in both positions. The plus and minus .25 is used in the same way. The dull patient may not recognize the difference produced with a plus and minus .12, but many of them do.

Instead of using an astigmatic dial, a letter of the Snellen test types may be used without fogging, but I have found that a fair degree of confusion often is encountered. In using the astigmatic dial and fogging, the patient is asked only to tell the difference between a black line and a grey one. If the principal meridians have not been located definitely, follow the above procedure in the 90 degree and one hundred eighty degree meridians, then in the 45 degree and one hundred thirty-five degree meridians. When this is completed, fogging is reduced .25 diopter at a time until maximum vision has been reached.

To Test For Axis: The cross cylinder is used without fogging to test for axis. The approximate axis was determined by the position of the black line on the astigmatic dial. With the cross cylinder the axis location may be refined to within one degree. This test is based on the principle of obliquely crossed cylinders.

When two cylinders of like sign are placed with axes crossing obliquely, the result is a cylinder with increased power and an axis located somewhere between the two.

If two cylinders of opposite sign are crossed obliquely, the result is a power between the two and an axis outside the two axes, closer to the one of the greater power.

When the minus element lies at 45 degrees and the correcting cylinder at 90 degrees, a new cylinder is produced with axis somewhere between the two. The plus cylinder lying at one hundred thirty-five degrees further tilts the axis toward 45 degrees. The plus element augments the action of the minus element in shifting the axis closer to that of the minus. Here again, if minus cylinders are used in correcting the astigmatism, regard only the minus cylinder of the cross cylinder; when using minus cylinders, follow the red dots.

In testing for axis, the plus and minus .50 cross cylinder is used, and it is held with the handle parallel to the axis of the trial frame cylinder. Both cylinders thus cross the test cylinder obliquely, causing the formation of a new cylinder with axis on the side of the cylinder of like sign.

By rotating the handle between the thumb and fingers, the minus cylinder is thus made to lie 45 degrees from the axis in one position and 45 degrees to the other side in the second position, giving the patient rapid contrast between a new axis of the same power, first on one side of the test cylinder axis, then on the other. The patient is directed to look at a round letter which he can recognize clearly in either position or the cross cylinder. A round letter is chosen because it is the same in all its meridians and distortion does not depend upon the shape of the letter.

The minus cylinder at 45 degrees creates a new axis between 45 degrees and 90 degrees, while the plus cylinder at one hundred thirty-five degrees pushes the axis farther from 90 degrees toward 45 degrees; when the second position is assumed, the axis is moved to the other side of 90 degrees and a rapid, sudden contrast is given between the two axis locations. The patient can readily decide which is more distinct.

If the minus cylinder is at one hundred eighty degrees in the trial frame, the cross cylinder handle is held in a one hundred eighty degree position. In one position, the minus cylinder will be at 45 degrees. If position one is better than position two, shift the trial frame cylinder toward the minus cylinder of the cross cylinder in position one; i.e., toward one hundred thirty-five degrees. The trial frame cylinder should be moved in steps

of 15 degrees until you have passed the point where position one is better; then steps of 5 degrees until it again reverses direction. When the axis is located within 5 degrees the changes in axis are much smaller. The patient will either say, "The two positions are equally bad," or will continue requesting changes of 1 degree or less, first in one direction, then the other.

The plus and minus .50 cross cylinder is used in testing for axis. The axis is dependably located to within one degree if the test is conducted patiently.

HEMORRHAGES OF THE RETINA NEWER TREATMENT

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CONSERVATION of vision programs comprise prevention of visual impairment due to disease or trauma, restoration of visual functions, practices to guard against transmission of blinding diseases and to prevent injuries. Principal causes of failure to realize the objectives of a program are delay in instituting treatment and neglect to continue it long enough.

Hemorrhages from retinal vessels damage the retina and choroid to an extent that serious impairment of function often remains after the hemorrhages have disappeared. Among diseases that are associated with bleeding from retinal vessels may be mentioned diabetes, nephritis, vascular hypertension, angiosclerosis, increased intracranial pressure with choked disk, Eales' disease, Juniuss-Kuhnt disease and allied degenerations found in the macular region, and sometimes glaucoma.

Until recently treatment of hemorrhages of the retina has been largely dependent upon successful management of the associated disease. For the hemorrhages themselves treatment has been directed to reduction of blood pressure and measures of doubtful value designed to promote absorption of blood and residual material resulting from the presence of free blood in the eyeball. Only recently has any effectual treatment been investigated for sight saving management of thrombosis of the central retinal vein or its tributaries.

Finding defective blood vessels in cases of hemorrhages of the retina, where they are dramatically available for observation, implies that similar defective vessels are distributed generally about the body; in cutaneous areas they are available for studies that cannot be made on retinal vessels. Biologic and histologic investigations of capillaries in health and disease have contributed to the understanding of the phenomenon of retinal hemorrages and opened ways for clinical studies that encourage us to look forward to a further reduction of the incidence of blindness.

Retinal hemorrhages occur because of increased fragility and permeability of capillary walls, although in many cases tests for fragility and permeability indicate that the walls are normal. Such negative cases should be retested at intervals, for defects can be expected to become manifest in time. Evidently other etiological factors may and do play important roles in the production of bleeding. Increased capillary fragility or permeability is present in about 75 per cent of cases of retinal hemorrhage.[1] About one-half of patients who have either of the capillary deficiencies will have both.

The degree of fragility is determined by the method of Göthlin; the presence of increased permeability is found by the dye method of McMaster. Both tests show that capillaries are always normal in normal persons, and normal also at times in about one-fourth of patients who have retinal hemorrhages. Whenever tests reveal increase in fragility or in permeability the evidence is positive and so indications for treatment are definite.

The newer drugs in treatment of hemorrhages in the retina are hesperidin and rutin; both are flavonol glucosides and are classed as vitamin P (P stands for permeability[2]). Hesperidin was used before rutin became available. Comparisons showed that the former in crude forms had only about one-tenth the activity of the latter and varied in potency, and in purified states was still less active. So rutin supplanted hesperidin.

Rutin is practically nontoxic and noncumulative and can be given in liberal dosage over a period of as many months as may be desired.

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[1] Shanno, R. L., Griffith, J. Q., Jr., and LaMotte, W. O.: Capillary fragility and retinal hemorrhage. Am. J. Ophth., 30:1556-1563, 1947.

[2] Stocker, F. W.: Experiments Concerning Possible Influences of Rutin Given by Mouth on Permeability of Blood-Aqueous Barrier. Arch. Ophth., 37:586-590, 1947.

The amount of lymph and its rate of flow depend upon how much fluid passes through capillary walls. Where intracapillary pressure is not demonstrably elevated it must be assumed that increased permeability accounts for any increase in lymph. Rutin is believed to have the effects of tightening capillary endothelium and strengthening capillary walls; these are reasons for administering rutin in cases of hemorrhages of the retina.

Since rutin is classed as a vitamin and a vitamin is used only to correct a state of deficiency, rutin is limited in application. Increased capillary fragility and permeability are deficiency states. It is justifiable to give rutin as a prophylactic for progressive capillary weakness in cases of hemorrhages of the retina, even though weakness cannot be demonstrated by the special tests at the moment.

Edematous areas in the retina suggest inefficiency in the underlying capillary bed with localized retention of fluid; here also rutin may be helpful because it improves circulation in capillaries.

Recurrences of retinal hemorrhages during or after administration of rutin do not condemn the drug nor warrant its discontinuance. Such recurrences suggest that the dosage be increased, or the presence of factors upon which rutin has no effect. A thrombotic clot may undergo organization with formation of new capillaries; such new vessels are weak-walled and rupture easily; the resulting hemorrhage is not etiologically identical with former hemorrhages, but nevertheless is classed as a recurrence. Rutin is thought to prevent recurrences in some patients.

Occurrence of subconjunctival hemorrhage while under treatment with rutin usually means a rise of both systolic and diastolic blood pressure and is not of itself alone an indication to discontinue the drug.

The initial dose of rutin is 20 mg. three times a day; it can be increased to 400 mg. daily, but it is seldom found necessary to give more than half that much. This agent has not been in use long enough to establish proof of a range of value in therapeutics, but evidence is already sufficient to warrant its use, when given in adequate dosage over a protracted period, in safeguarding the patient against recurrences of hemorrhage where the first one was associated with capillary inefficiency.

The process of formation of an adherent blood clot within a vein is thought to start with slowing of the blood current because of interference with normal rate of movement of the blood column, as from weak vascular tone or mechanical impediment. The next essential feature is a roughened area of endothelium, often located near where the vessel changes its direction, as where crossed by an artery, or it may be a localized endophlebitis. At this point, through the influence of a toxin or a ferment, for instance, or mechanical irritation, cells and fibrin are deposited progressively so that the thrombus enlarges by accretion. The conception that a thrombus grows by endothelial cell proliferation has not been as yet sufficiently supported by histologic examination to merit acceptance.

Thrombosis of the central retinal vein has been long considered uniformly fatal to vision and usually to the eyeball itself. Thrombosis of the tributaries is only less evil in degree, but forewarns of the probability of involvement of the central trunk itself, thus affording time for prophylactic trial of newer treatment. Formerly the expected end result was enucleation because of intractable glaucoma.

Several years ago, following the introduction of heparin in the treatment of hemorrhages, Edward Jackson suggested that this anticoagulant be investigated for use in thrombosis of the central retinal vein. Ophthalmic literature does not indicate that interest was aroused until recently. The agent has some disadvantages. It is administered intravenously; the effects on different patients are unpredictable and occasionally complications arise that are difficult to overcome.

Dicumarol, of more recent discovery, has attracted attention for use in postoperative conditions where venous thrombosis is present or in prospect. Following prostatectomy it apparently has reduced the incidence of thrombus formation and its consequences. The drug depresses prothrombin activity and has an inhibiting effect on the conversion of fibrinogen into fibrin, and thus is protective against the formation of a thrombus. Enlargement of an existing thrombus is arrested and actual reduction may follow. Accumulated experience encourages further use of dicumarol and rutin in the treatment of hemorrhages of the retina, including thrombosis of the central vein and its tributaries.

Dicumarol has almost entirely supplanted heparin in the treatment of retinal hemorrhages, although it is slower in action. Where urgency demands quick effects heparin can be used intravenously for a few days before beginning oral administration of dicumarol.

Dicumarol is a powerfully acting agent whose effects tend to be mildly cumulative and somewhat prolonged. Some patients react too soon and too profoundly, and suffer too much of a reduction of prothrombin, with a hazardous hemorrhage resulting. What amounts to excessive dosage for some persons damages capillaries even though rutin is being given in dosages that would protect other patients. Each case requires individualized study.

It is of utmost importance that the patient be in a hospital for frequent prothrombin time determinations by the Quick method and where fresh blood of compatible type is available for prompt

transfusions.[3] This warning applies even more emphatically where heparin is being given.

Upon admission to the hospital prothrombin time is determined and only an initial dose of dicumarol is given. After waiting two days the prothrombin time is again determined, and the future course is planned according to the effects observed from the initial dose. Only after dosage has been calculated to maintain prothrombin clotting time at from 50 per cent to 60 per cent of normal can the patient be considered ambulant. Then the patient is instructed to return to the hospital weekly or as directed for further determinations of clotting time and adjustment of dosage.

In cases where the patient requires medication in addition to dicumarol and rutin, greater watchfulness is necessary to avoid the reduction of prothrombin below a safe level.

The features of the lesion in Junius-Kuhnt disease, and in similar macular degenerations, include one or more hemorrhages and the prognosis is certain blindness. Some of the tissue destruction could be due to deficiency in the vessels of the capillary bed underlying the lesion, and if so dicumarol and rutin therapy, begun early and continued persistently over a long period of time without interruption, might prevent blindness, or at least conserve considerable vision that otherwise would be doomed.

[3] McLean, A. L. and Brambel, C. E.; Dicumarol and rutin in retinal vascular disorders. Trans. Am. Ophth. Soc., 44:194-213, 1946, and Am. J. Ophth., 30: 1093-1108, 1947.

HEADACHE*

Charles L. Mahoney, M.D.

TERRE HAUTE

HEADACHE is the most common complaint appearing in our histories. Grimes estimated that 10 per cent of the patients that were seen in private practice complained of headaches. Basso stated that the symptom is the commonest of civilized people, while Crile maintained that it is the product of civilization. In considering this subject, there are two important facts which should be remembered. Firstly, the ophthalmologist and otolaryngologist should not divorce the eyes and the ears, the nose and the throat from the rest of the body. Secondly, the general physician should not divorce the ophthalmologist and otolaryngologist from general medicine, because of the variety of discomforts and the range of severity in headaches.

The research publications of the Association for Research of Nervous and Mental Diseases assembled a volume entitled "Pain." These studies are basic in our consideration of this problem. The first conclusion is, that of the tissues covering the cranium, all were more or less sensitive to pain, the arteries being especially so. Second, of the intracranial structures the great venous sinuses and their tributaries from the surface of the brain, parts of the dura at the base, the dural arteries and the cerebral arteries at the base of the brain, also the fifth, ninth, tenth cranial nerves and the upper three cervical nerves were sensitive to pain. Third, the cranium, including the diploic and emissary veins, the parenchyma of the brain, most of the dura, and most of the pia and the appendable lining of the ventricles and the choroid plexuses were not sensitive to pain. It has been demonstrated that traction on the veins or venous sinuses from the surface of the brain, also traction on the middle meningeal arteries, which are especially sensitive, causes pain. Traction on the large arteries at the base of the brain and their main branches, distention and dilatation of intracranial arteries, inflammation in or about any of the pain-sensitive structures of the head, direct pressure by tumors on the cranial and cervical nerves containing many pain aberrant fibres from the head precipitates pain. Lewis and Wolff also demonstrated painful sensory endings in great multitude in the nasal mucosa, especially in the region of the ostium of the sinuses, and to a lesser extent in the mucosal lining of the accessory sinuses of the nose.

The sensory nerve supply of the intranasal structures comes from the first division of the fifth nerve through the ciliary or anterior and posterior ethmoidal nerves, which supply the anterosuperior intranasal structures, and the naso- or sphenopalatine ganglion, which supply the posterior and lateral nasal structures of the nasal septum. Pain of nasal origin is not present if the intranasal structures are normal in their anatomic relationship and are able to carry on their function in a normal manner. If an inflammatory process changes this relationship, a cause for pain could exist. Why certain individuals who have gross intranasal anatomic abnormalities or extensive pathologic proc-

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esses do not have pain as an outstanding symptom is rather difficult to explain.

The paper of McCullough, Goodell and Wolff is especially valuable in demonstrating the regions of reference of pain originating from irritation of various regions of the nasal chambers and sinuses. Stimulation of the antero-inferior portion of the nasal septum, the lateral wall of the maxillary sinus, the middle and inferior turbinates and the ostium of the maxillary sinus, produced a reference of pain as a rule to the malar and zygomatic regions on the homolateral side, while stimulation of the superior portion of the nasal cavity produced reference of pain to the eye, infra-orbital region and the nasion. Stimulation of the mucosa of the sphenoid produced a slight degree of pain in the vertex of the skull. It has been pointed out by Eagleton that pain referred to the nuchal region, so often described as characteristic of sphenoiditis, occurs only when the sphenoid basis or occipital basis are involved in osteomyelitis. It has been noted that the major factor in producing such pain was not increased by venous pressure, but rather the pressure of the two mucosal surfaces against each other. McCullough referred to the fact that secondary vasodilatation and reaction of hyperemia of the nasal structures, after the use of vasoconstrictors in the nasal chambers, may cause recurrence of headache. Thus, it would appear from investigative work that is done on the subject of sinus headache, that with infrequent exceptions sinusitis, especially the chronic type, is usually a painless disease of itself, causing pain secondarily by recurrently infecting the nasal mucosa, causing inflammatory reactions which are the more direct cause of the pain. Nasal contact headaches, which can be relieved temporarily by cocainization of small locations of various parts of the nasal chamber, may demonstrate a spur or an adhesion, or a localized congestion or deflection of the septum against a turbinate, which if removed will permanently relieve the discomfort. If the headache is due to acute or chronic engorgement of the nasal mucosa, particularly that over the turbinates, attempts at decongestion should be made. Such decongestion may require drainage of a sinus, treatment of emotional instability or an attempt made to discover the exciting cause of an allergy. If this proves impossible, temporary decongestion by cauterization of the vasodilator and secretory motor fibers to the nasal mucosa may give relief. Under this at least deserving of mention are: refraction of the turbinates from the area compressed by it when engorged; acupuncture repeated a number of times; submucosal injection of psylnasol, which is the coagulant; the submucosal cauterization of the affected area; or nonspecific treatment with vasodilators, as very small doses of prostigmine or injection of histamine, the last of which will be described in more detail when considering migraine or histamine cephalalgia.

Those headaches due to pressure within the sinus, as from mucopus, an osteoma or a mucocele, which are occasionally observed, will be relieved by suitably directed surgical treatment.

The neuralgias present a somewhat different type of pain. Most commonly, trigeminal neuralgia of the primary type is not difficult to diagnose, as evidenced by the lancinating pains which come on with abruptness in the trigger zones about the face, which cause the patient to cringe for fear you may touch such points. This condition is almost always unilateral, occurring in patients usually beyond middle age, and confined mainly to the second and third divisions of the fifth nerve.

In the secondary type of this pain the attacks are usually longer and less severe. As a rule, no trigger zones are present and the etiology is generally found in dental or nasal pathology.

Glossopharyngeal primary neuralgia also comes on with a sudden stabbing pain in the ear with a trigger zone in the tonsillar area, usually set off by a drink of cold water. In the secondary form, which is more common, the picture has been seen by all of us following tonsillectomy, in which the patient complains of earache with the absence of disease in the middle ear. It is necessary to remember that inflammatory processes, involving the tonsillar area and adjacent area of the tongue, the teeth and mandibular joint, or any lesion of the tenth nerve in the pharynx or the rim of the larynx, or the cervical glands, may cause this.

Vidian and/or sphenopalatine ganglion neuralgias, as described by Vail and Sluder, seem to resemble each other markedly. This pain, as described by Vail, may have a sudden, severe onset, localized back of the eyeball, radiating to the temple, back of the ear, even to the occiput and down to the neck and shoulder. A diagnosis of such an origin of pain can be attained by stopping the headache on cocainization of the sphenopalatine ganglion or by the application of cocaine to the front wall of the sphenoid, or actually into the sphenoid sinus. Costen has described the syndrome of temperomandibular neuralgia which, according to him, may cause pain in the top of the cranium, occiput and behind the ears, and may radiate down the spine a way. This author makes the diagnosis by the presence of dental malocclusion, tenderness on palpation of the joints, both internally and externally, and by x-ray. There is also a history of a snapping or popping of the jaws, which is usually worse at the end of the day. Dental adjustments will alleviate this.

Neuralgias which are more rarely seen are geniculate ganglion neuralgias, which are diagnosed by the finding of herpes involving the external canal and often the concha. Tympanic plexus neuralgia is a rare type, involving the tympanic branch of the glossopharyngeal nerve. Neuralgia of the great superficial petrosal nerve may accompany some type of petrositis and may be the cause of the retro-ocular pain in this.

The so-called tension headache or muscle headache, as described by Auerbach as an indurated

nodular headache, is probably the only severely secondary type of headache which we may have. By that I mean it is secondary to other headaches or to fatigue, et cetera. It has been described by Joseph Hersh of late as myocytis cervicalis and he found it more often than any other type of headache, and quite often accompanied by some other type of headache, such as migraine. This is often accompanied by tenderness of the muscles of the scalp, usually the posterior cervical and the trapezius muscle, which may be indurated and nodulated. These nodules have have been removed and sectioned with the failure of pathological findings. They are probably due to small areas of muscle spasm secondary to a collection of metabolites. This is the type of headache which the medical man has failed to evaluate and recognize, and has been a boon to some individuals who were beyond the pale of legitimate medicine, who by their manipulations inadvertently gave the patients relief from headache, which the medical practitioner had not been able to offer them. It is ofttimes found in stenographers, truck drivers and people who must hold their neck in a peculiar position in order to do their work. It is also very common in association with other types of headache. The physiology of this type of reaction has been described in detail by Larente DeNoe in his analysis of the activity of chains of internuncial neurons. He states that the prolonged bombardment of pain impulses sets up a vicious circle of reflexes spreading through a pool of many neuron connections, both upward and downward, and sometimes even across the spinal cord. Because of the summation principle of nervous impulses, there is kept in such pools a constant circling of activity across the synapsis involved. Thus, involvement of the sympathetic motor neurons which control vasomotor tone produced spasm in the arterial and venal ends of the capillary loops, so aiding the filtration pressure to cause edema and swelling. Other synapsis involved may be the anterior horn cells giving rise to skeletomuscle cramps and spasm. This type of headache responds well to physical therapy, which might well be kept simple, as the use of heat and massage. However, occasionally it is necessary to give some vasodilator, as nicotinic acid or histamine. It responds readily to such simple therapy in the great percentage of such cases.

THE VASCULAR CEPHALALGIAS

The headaches arising from the blood vessels in the head may be divided into the vasodilating headaches observed in febrile disease, and the vasodilating headaches in association with release of histamine into the vessel walls, the most spectacular of which is the histamine cephalalgia described by Horton and his co-authors. Also migraine. The most serious mistake which is made about this disease is to consider it a psychoneurosis. The lack of anatomical change in the body of the patient with migraine has lead many excellent people into this error. We know something about its pathologic physiology, but we know a great deal about it descriptively.

Migraine is a periodical sensory discharge, ofttimes accompanied by nausea and vomiting, thereby getting its name "sick headache." Its hereditary nature can nearly always be traced in the history and is an important point to develop for its diagnostic significance. The aurae are not always easily recognized as such, even by the patient. The classical zigzag eye flashes are the exception, as well as the temporary aphasias. More often, the aurae will be of some peculiar bodily state, such as euphoria, chills, general gastro-intestinal distress, general depression or fatigue, prodigious appetite, et cetera. This lasts for a variable period, usually twenty to forty minutes, to be followed by a headache, often unilateral, which sometimes appears to be back of one eye. However, as they become more frequent, the headache ofttimes involves the entire head. As the headache comes on the aurae disappear. The headache lasts for a variable length of time, usually twelve to twenty-four hours, and is quite severe. Visual disturbances occur in about half of the cases, the others have disturbance such as numbness of the extremities; in other cases there is a dysarthria, aphasia, and even temporary weakness in the extremities. There is occasionally a hemianopsia or a diplopia, which may be of the third nerve type.

The actual vascular reaction in migraine occurs in two stages; first, the vasoconstriction, which is responsible for the aura, scotoma and cortical phenomena. This is followed by a vasodilatation permitting increased pulsations and stretching of the vessels at the base of the brain. Studies of the physiological mechanism of migraine by Pheiffer, et al., lead to the conclusions that the excursions of the blood vessels could be traced to blood volume changes, i.e., cerebral hemoconcentration, unassociated with compensory changes in the peripheral vascular tone. Accordingly, treatment should be aimed at increase in the blood volume or restoring an intense vascular tone. The hypothesis as advanced by Pheiffer, et al., accounts for many of the vagaries of the migraine syndrome, as the onset at puberty and relief frequently at menopause; the increased incidence in the female over the male being due to the greater salt and water retaining power of estrogens over androgens; relief of migraine by pregnancy where normal concomitant increase of the blood volume obtains.

Histaminic cephalalgia or erythromelalgia were promulgated by Horton, et al., who noticed in a group of patients with the chief complaint of headache that certain definite signs and symptoms tended to predominate. To this group they add the descriptive term "erythromelalgia of the head," later called "histaminic cephalalgia," because the same syndrome could be reproduced by injections of histamine. This headache, they say, is periodic, usually unilateral, appearing in the third decade

or beyond, which can be precipitated by alcohol or the subcutaneous injection of histamine, about one-third of a milligram, after latent period of five to twenty minutes. This is not accompanied by aura and there usually is no pulsation to the pain. This can be partially alleviated by pressure on the carotids, temporal arteries or the arteries supplying the part of the head in which the pain seems to be. It is associated with signs of autonomic overactivity of the hemolateral sides, such as congestion of the nasal mucosa, vasomotor rhinitis, vasodilatation of the skin and conjunctiva, which so far I have not noted for sure. It is sometimes also associated with a vertigo which may be likened to an endolymphatic hydrops. Many of these headaches of either type, if they can be classified as two distinct entities, can be relieved by benadryl or pyribenzamine in adequate doses. These antihistaminic drugs, in relieving the discomforts, focus our attention on the allergic aspects of these two diseases. A rather complete inquiry as to allergic phenomena in the patient's history and family history should be accomplished, possibly by asking if the patient has ever had hives, hay fever, asthma, eczema, et cetera, which will bring forth the admission of certain sensitivities. Further inquiry into the cause of such phenomena may reveal that the patient has been discerning enough to note that a great many strawberries, tomatoes or chocolate milk, et cetera, may bring on hives, and the patient may recall that these headaches sometimes follow orgies of the same food.

A dietary diary, with the patient writing down everything that he has to eat, even between meals, plus a notation of his symptoms, if kept for a few weeks may prove illuminating. Those cases which are not relieved in this way might well have more complete allergic study to good advantage. Vasoconstrictors, such as ergotamine tartrate, oxygen, or better still, dihydroergotamine tartrate, should be administered. The last is preferable because it has fewer of the side reactions of the ergotamine.

OCULAR CAUSES OF HEADACHE

Some men have attempted to arrange the instance of frequency of headache due to eyestrain. Snell's arrangement is in five parts: One, simple and compound hypermetropic astigmatism. This, he says, accounts for about 50 per cent of the ocular headache due to eyestrain; hypermetropia, 34 per cent; simple and compound myopic astigmatism, 11 per cent; mixed astigmatism, 3 per cent; myopia, 1 per cent. Snell has not evaluated the instance of muscle imbalance, which undoubtedly is important in the cause of headaches. Cephalalgia from eyestrain comes chiefly through the ophthalmic division of the trigeminal nerve. As Paton has pointed out, the central connections of the first division of the fifth nerve passing down so far into the cervical region may explain the headache felt in the region of distribution of the great occipital and upper spinal nerves. The deep connections of the trigeminal with the vagus are most likely accountable for the vomiting which often accompanies acute glaucoma or the relief of gastric distress which is obtained on occasions by the correction of errors of refraction or muscle imbalance. Again, it is due to the deep connections of the trigeminal, which explains sneezing on suddenly entering a brightly lit room or the bright sunshine.

Referring to those cases of cephalalgia caused by muscle imbalance, we must bear in mind that the elevation and depression of the eyes are performed by a mechanism more complex than that used for the lateral movements. Thus, as everyday movements are chiefly lateral in character, when vertical movements are called on in excess of what is ordinarily required, pain is the result. Esophoria and hyperphoria are more apt to cause pain than exophoria. This pain is usually frontal, supra-orbital or orbital. In hyperphoria due to head tilt, often seen in this condition, the pain may be occipital, or even along the superior and inferior nuchal lines, or the point of attachment of the skull to the sternocleidomastoid muscle. Exophoria causes headache only when due to a convergence insufficiency and then only following close work. The tropias are rarely associated with headache, because the headache in heterophoria is due to the effort exerted by the patient to attain binocular vision. The heterotrophic patient usually has poor fusion and often makes no attempt to attain binocular vision and so does not develop headache of muscle origin.

The history on the examination for an ophthalmic headache should contain inquiry into the type of headache, its location, its radiation, what time of day it is apt to occur, any relation between the pain and the use of the eyes, that is, does the pain follow reading, movies, crocheting, driving, train riding, et cetera, does it occur outdoors as well as indoors, and has the headache been corrected by any means, such as wearing glasses. We should also know the patient's occupation, his mode of life, and any associated symptoms, such as watering or burning of the eyes, also something about the patient's general health.

Ocular headache is rarely unilateral except when it is due to some organic disease of the eye. Probably the commonest cause of unilateral headache due to eye disease or trouble is iritis, which causes a neuralgic type of pain in the affected eye associated with a hypersensitivity to light, combined with tenderness, lacrimation and sometimes blurring of vision. Acute inflammatory glaucoma causes a severe ache in the affected eye, which radiates over the whole side of the head and face and is associated with loss of vision, dilation of the pupil, deep ciliary injection, hardness of the globe and corneal edema. The pain from retrobulbar neuritis is usually in the eyeball and orbit, and is felt more severely on rotation or pressure against the eyeball. Conjunctivitis, especially when complicated by the presence of minute corneal ul-

cerations, is productive of severe headache and severe photophobia.

There are many causes of proptosis, the most common being due to thyrotoxicosis. Headache is frequently complained of by these patients. The prominent eyes are not sufficiently protected from the light, so that headache accompanied by lacrimation is often present. Tinted lenses may give relief. Also, the eye bath or artificial tears should be used frequently. The rapidly growing orbital tumor or cellulitis may be the cause of severe headache. Yet we have all seen proptosis due to osteoma, or some similar, slow proptosing mass, which caused no headache at all, even though the proptosis was severe.

The examination of a headache patient bears a direct relation to the degree of success encountered in treating it. The examination, to be complete, must include a thorough refraction, most often under a cycloplegia, careful investigation of the muscle balance, ophthalmoscopic examination, study of the anterior segment of the eye with the slit lamp, visual field investigation and measurement of the intra-ocular pressure. Adequate treatment may require prisms incorporated in the glasses or in the hook-front frame for the part time wear, orthoptic exercises, muscle surgery, and attention to the individual's mode of life.

It is well to remember that a patient with ocular muscle imbalance may have his primary disturbances elsewhere, the muscle trouble being secondary to a hypo- or hyperthyroidism, Parkinson's disease, encephalitis or diabetes, so that the pain may be a tertiary portion of the entire picture.

There are those who suffer from retinal irritation due to a bright light, often combined with a fatigue produced by prolonged studying. These patients are far removed from the albinotic state but they always remain sensitive to strong light. They have decided intolerance for bright or reflected light of any type. These patients may have mild congestive symptoms. They appear to have a mild conjunctivities with some swelling of the lids. There is blepharospasm and photophobia. These are ofttimes relieved by wearing tinted lenses, and by taking vitamin A, if inquiry into the diet might reveal a deficiency.

In headaches due to increased intracranial pressure, when due to an expanding intracranial lesion, such as tumor, abscess or hematoma, the ache is frequently described by the patient as "bursting." It may pulsate or throb; it may or may not be localized. As a rule, lesions in the posterior fossa give occipital headache, frequently extending down into the neck. Other than this, the localization of an expanding intracranial lesion on the basis of a headache is dangerous, since lesion on one side may produce headache on the other side. This type of headache is usually intensified by coughing or straining or any maneuver which will increase the intracranial pressure. It is often worse following a large fluid intake and may be accompanied by nausea. Examination of the eyegrounds to determine the presence or absence of papilledema should be done in all cases of headache. Such head pain usually does not occur as the sole or principal symptom of intracranial disease. It is usually associated with diplopia, hemiparesis, facial paralysis, ataxia, loss of visual acuity, vomiting, reflex changes, mental disturbances and visual field defects.

Headaches due to hypertension rarely occur unless the systolic blood pressure is over 200 mm. of mercury. This headache is also like that due to an expanding intracranial lesion, throbbing in type, generalized and more intensified by coughing, straining or bending over. The severity and frequency of this cephalalgia is in almost direct ratio to the activity of the individual. An examination of the eyegrounds here will not fail to reveal at least several clues as to the identity of this headache. The review of such a fundus may also call to mind that seen in uremic poisoning, which is also a condition associated with a severe headache. Headache due to cerebral edema, as that following overindulgence in alcohol, is well known. The drug of excellent choice here is benzedrine sulfate in doses of ten milligrams by mouth. Next to this comes caffeine and phenacetin.

CONCLUSIONS

When headache is the patient's chief complaint, the causes to be considered are almost without number. A thoughtfully taken history should lead the physician into paths leading to further investigation. A detailed examination may not be neglected. Nor should a careful inquiry into the emotional state, which so often plays a significant role in the production of headache, be disregarded. From the foregoing review of headache it may be seen that inflammation or pressure within the sinuses only rarely produces headache, and that the so-called sinus headache can nearly always be ascribed to some other cause, sinusitis as a rule being a painless disorder.

This paper has omitted some of the rarer types of headache. It is to be hoped, however, that it can serve as a working basis for the average patient who comes in and says, "Doctor, what can you do for my headache?"

PERIORBITAL CELLULITIS: A REPORT OF FOUR CASES*

W. R. Hickman, M.D.

LOGANSPORT

PERIORBITAL cellulitis is not a common occurrence. It is seen most often in children and young adults. It occurs during acute sinus infections and during acute exacerbations of chronic sinus disease. It may also follow swimming and diving. Occasionally the acute exanthemata are responsible.

Invasion of the periorbita is most often due to infection in the ethmoid labyrinth. The route of invasion may be through necrosis or a dehiscence in the lamina papyracea or through the venous, lymphatic or nerve channels. The frontal sinus is second in frequency, the maxillary third, and the sphenoid (lateral wall) last.

The purpose of this paper is to report four cases of periorbital cellulitis encountered in practice during the past year.

Before presenting the clinical reports, a brief review of the anatomy of the orbit and its related structures should be in order.

The following is from "A Comprehensive Description of the Orbit, Orbital Content and Associated Structure," prepared by Drs. McCotter and Fralick for the Section on Instruction of the American Academy of Ophthalmology and Otolaryngology of 1943:

"The orbital cavities are large, foursided pyramidal shaped spaces. The base is forward and lateral, and outlined by the orbital margin, while the apex is directed backward and medially and is at the optic foramen. The orbital margin is formed by the frontal bone above, the zygomatic bone laterally, and the zygomatic and maxilla below. The inferior margin is continued medially and upward as the anterior lacrimal crest on the nasal process of the maxilla. Here it forms the anterior boundary of the lacrimal canal and fossa. The superior orbital margin, if followed downward and medially, is found to form the posterior lacrimal crest on the lacrimal bone.

"The roof of the orbit is formed by the orbital portion of the frontal bone, posteriorly by the lesser wing of the sphenoid bone. The roof of the orbit may be separated into two tables enclosing extensions of the frontal sinus for a variable distance posteriorly. It is arched from before backwards and from side to side.

"The medial wall is nearly parallel with the midsagittal plane. It is formed by the nasal process of the maxilla, the lacrimal, the papyraceous lamina of the ethmoid, and a portion of the body of the sphenoid bone. It will be observed that the medial wall is in direct relation to the lower part of the frontal, the ethmoid, and sphenoid sinuses. The openings into the anterior and posterior ethmoid canals are found at the junction of the papyraceous lamina of the ethmoid and the orbital plate of the frontal. They transmit the ethmoidal vessels and nerves. The superior and mesial orbital walls are the weakest. The mesial wall often shows dehiscences in the paper plate of the ethmoid. This is important, in that it may be responsible for the production of orbital cellulitis secondary to ethmoiditis as a result of the mucous membrane of the ethmoid sinus being in direct contact with the periorbita.

"The inferior orbital wall is formed by the zygomatic bone, the orbital surface of the maxilla and the orbital process of the palatine bone.

"The optic foramen is nearly circular, is at the apex of the orbital fossa and transmits the optic nerve and sheath, and the ophthalmic artery.

"The periosteum of the orbit, (periorbita), is a direct continuation of the periosteal layer of the dura as it passes through the optic foramen. The meningeal layer of the dura is continued as the sheath of the optic nerve.

"The periorbita is continuous through every opening in the orbit with the periosteum of adjacent bones. It is loosely attached to the walls of the orbit throughout much of its extent, and may be separated without difficulty.

"The orbital septum is attached to the periosteum at the orbital margin. It consists of a fibrous membrane for each eyelid—also known as the superior and inferior palpebral ligaments. The superior palpebral ligament is attached to the periosteum of the superior half of the orbital margin, to the deep portion of the medial palpebral ligament, which is attached to the posterior lacrimal crest, to the lateral palpebral raphe, and is continuous with the anterior surface of the superior tarsal plate. The inferior palpebral ligament is much thinner than the superior. It is attached to the periosteum of the inferior orbital margin. It is continuous with the anterior portion of the medial palpebral raphe. Vessels and nerves

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perforate the septum on the way to the face and scalp. The septum presents anatomical limits of extension of inflammations from the lid to the orbit and vice versa."

CASE I.

Thirteen year old white boy admitted to Memorial Hospital, April 8, 1947.

CHIEF COMPLAINTS

1. Acute redness and swelling of both eyelids with some proptosis of the left eyeball.
2. Pain in, back, and over eye.

MODE OF ONSET

Patient contracted a cold on April 2, which grew progressively worse. He complained of pain about the left eye and forehead, beginning April 4, and increasing in intensity until April 6, at which time the pain receded. However, the parents stated that the redness and swelling of the lids became apparent at this time. The temperature was between 100-102 degrees F. from April 6 on to admission. On April 7, patient received 20,000 units penicillin, intramuscularly q 3 h. During night of April 7, patient was said to have had two convulsive seizures.

PAST HISTORY

Usual childhood diseases, with good recovery.

PHYSICAL FINDINGS

Marked edema and redness of both eyelids on the left side, extending into the cheek, temple, and up onto the forehead. Definite tenderness and pain on palpation about internal canthus, but little over frontal sinus area. There was slight proptosis of the globe with limitation of extra ocular movements. Pupil was regular in size and shape, and reacted to light and accommodation. No definite fundus pathology present in either eye.

Neuromuscular system was normal. No muscular spasticity nor neck rigidity.

Heart, chest, abdomen, normal.

The nasal mucosa was red and swollen in both nasal passages, with free mucopurulent exudate in the left middle meatus. Naso- and oropharynx were reddened and congested, with moderate mucopurulent exudate covering the surface.

The ears were normal in appearance, moderately severe cervical adenitis, anterior and posterior, more marked on left.

X-RAY REPORT

All sinuses clear and well developed, except clouding of left posterior ethmoid.

LABORATORY REPORT

Urinalysis: Hazy, straw colored. Acid in reaction. Specific Gravity 1.020. Albumin, sugar, and acetone negative. Occasional pus cell observed. No casts or red blood cells.

BLOOD REPORT

DATE	4-8-47	4-12-47
Hemoglobin	11.5 gms.	12.0 gms.
Red Blood Count	4,170,000	4,610,000
White Blood Count	13,050	18,025
Differential		
Neutrophiles	82.5	82.0
Segmented	67.5	73.0
Bands	15.0	9.0
Eosinophiles	1.5	0.5
Basophiles	0.5	
Lymphocytes	15.5	12.0
Mononuclears		5.5

CLINICAL COURSE

Temperature 101 degrees F. on admission. Patient was placed on sulfadiazine 7.7 grs. q 4 h and penicillin, 20,000 units, intramuscularly q 3 h. Shrinking solutions were employed in the nose, with gentle aspiration of exudates.

Temperature was down to 100 degrees F. the following day, (April 9) and there was a little less edema of the lids.

However, it was deemed best to drain the orbit. This was done under ether anesthesia. An orbital incision was made on the medial side, through the skin, soft tissue, and periosteum. The periorbita was elevated along the medial orbital wall. A moderate amount of thick, bloody drainage was obtained but no frank pus. Two hundred thousand units of penicillin crystals were dusted into the opening, one Penrose drain was used and the soft tissue closed loosely.

The temperature returned to normal the day following surgery and remained so, with the exception of slight P.M. exacerbations for a few days. Sulfa therapy was discontinued the second day postoperative. Penicillin therapy was continued until 24 hours prior to dismissal. Recovery was uneventful. The nasal discharge ceased after the second day postoperative. Patient was discharged from hospital April 15 with instructions to return to office in one week.

Two days later (April 17) family called, stating that the swelling of lids had recurred. Patient was seen in office. Temperature was 103 degrees F. and the swelling of the lids was as marked as on admission to hospital.

Patient was referred to Dr. Ellis, who reported that on resumption of sulfa and penicillin therapy and irrigation of the left maxillary sinus, the symptoms again subsided.

Upon return from hospital, patient was observed in office twice weekly for three weeks. The first lavage of the antrum presented a moderate amount of purulent material, but two later ones were clear.

This case has been in for observation several times since, but no evidence of sinusitis has been observed.

CASE II.

Eight year old boy observed in consultation, May 22, 1947.

CHIEF COMPLAINTS

1. Acute redness and swelling of both upper and lower eyelids of right side.
2. Pain in and over right eye.
3. Generalized headache, malaise, nausea and vomiting.
4. Temperature 101 degrees F.

MODE OF ONSET

Patient contracted a cold one week previously. Day before consultation complained of headache and ran an undetermined temperature. Parents stated that he was very restless and apparently delirious during the night. All symptoms were increased in the morning, with the appearance of swelling of the right eyelids.

PAST HISTORY

Usual childhood diseases, with good recovery.

PHYSICAL FINDINGS

Definite edema and redness of both eyelids on the right side. Pain and tenderness on palpation about the internal canthus.

No proptosis or limitation of motion of the globe.

Pupils regular in size, shape, and reaction.

Eyegrounds revealed no pathology.

Neouromuscular system normal.

Heart, chest, and abdomen normal.

The nasal mucosa was reddened and swollen in both nasal passages with a small amount of mucopurulent exudate in the right middle meatus. The naso- and oropharynx were inflamed and covered with a thin, mucopurulent exudate. Moderate cervical adenitis. Ears were normal.

X-RAY REPORT

Clouding of the anterior ethmoid cells on the right, posterior group normal.

LABORATORY REPORT

Urinalysis—Normal	
Blood Report—Hemoglobin	12.5 gms.
R. B. C.	4,320,000
W. B. C.	12,150
Differential	
Neutrophiles	65.0
Lymphocytes	30.0
Mononuclears	3.5

CLINICAL COURSE

Temperature 101 degrees F. on admission. Sulfa and penicillin therapy instituted. Shrinking solutions were employed in nose. Temperature was down to 99 degrees F. the next day and to normal on the following day, where it remained. The redness and edema of the lids began to recede after 24 hours and the nasal exudate was likewise affected. Patient was discharged five days after admission. There have been no recurrences.

CASE III.

Three and a-half year old boy, observed in consultation in home on April 11, 1947.

CHIEF COMPLAINTS

1. Acute redness and swelling of both upper and lower eyelids of left side.
2. Pain in and about left eye.
3. Restless, and temperature elevation to 104 degrees F.

MODE OF ONSET

Patient contracted a cold ten days before, which was complicated by a moderately severe cervical adenitis, bilateral, more marked on the left side. Redness and swelling of the left eyelids were noticed April 10, at which time temperature was 104 degrees F. Penicillin, 300,000 units in wax, was given by family physician on this day.

PAST HISTORY

Usual childhood diseases, with good recovery.

PHYSICAL FINDINGS

Definite edema and redness of both eyelids on the left side.

Pain and tenderness on palpation about the internal canthus.

No proptosis or limitation of extra ocular movements.

Pupils regular in size, shape, and reaction.

Eyegrounds normal.

Heart, chest and abdomen normal.

Neuromuscular system normal.

The nasal mucosa was slightly congested, with only a slight mucoid exudate in the left naris. Pharynx and ears normal.

Patient was hospitalized April 12. Temperature on admission was 100 degrees F.

LABORATORY REPORT

Urinalysis	normal
W. B. C.	10,300
Differential:	
Neutrophiles	59%
Lymphocytes	41.0

X-ray not ordered.

CLINICAL COURSE

Penicillin therapy, 20,000 units, intramuscularly q 3 h, was instituted and continued for three days. Temperature returned to normal within 24 hours. Swelling and redness of lids likewise receded. Patient was discharged on third day. No recurrence.

CASE IV.

Five year old boy observed in consultation May 23, 1947.

CHIEF COMPLAINTS

1. Acute redness and swelling of both upper and lower eyelids on the left side.
2. Pain about left eye.
3. Temperature 102 degrees F.

MODE OF ONSET

Patient had contracted a cold one week before and had consulted family physician, who placed him on sulfadiazine.

PAST HISTORY

Usual childhood diseases; not particularly subject to upper respiratory infections.

PHYSICAL FINDINGS

Moderate edema and redness of both eyelids on the left side.

Moderately severe congestion of nasal mucosa on the left side, with moderate mucopurulent exudate.

Naso- and oropharynx moderately congested. Moderate cervical adenitis. Ears normal.

Neuromuscular systems normal.

Heart, chest, and abdomen negative.

CLINICAL COURSE

Penicillin in wax, 300,000 units, were administered daily, along with previous sulfa therapy. Temperature returned to normal in 48 hours, along with rapid recession of eyelid swelling and redness. No recurrence.

SUMMARY

Four cases of periorbital cellulitis secondary to acute sinusitis have been reported. All cases were children, ranging from three and a half to thirteen years of age.

In all four cases the original site of infection was apparently the ethmoid labyrinth.

A combination of sulfa and penicillin therapy was used in three cases, and penicillin alone in one case.

In two cases penicillin in normal saline was administered intramuscularly. In one case pencillin in wax and oil was used. In the remaining case a combination of pencillin in wax and oil was used at home and penicillin in normal saline was used when patient was admitted to hospital.

In only one case was surgical intervention employed.

CONCLUSION

1. Early recognition of invasion of the periorbita from the adjacent sinuses and immediate institution of adequate chemotherapy and antibiotics is imperative for best results.

2. The use of combined sulfa and penicillin therapy seemed to be most effective.

3. Penicillin in wax and oil was equally effective as when used in normal saline, providing adequate amounts were administered.

4. However, when pus is formed in any space, surgical evacuation is mandatory, in addition to the above-mentioned therapy.

Voice of Medicine

E. M. Shanklin, M. D., Editor
THE JOURNAL of the Indiana State Medical Association
5141 Hohman Ave.,
Hammond, Indiana.

Dear Doctor:

May I be permitted to commend those of you who are responsible for the determining of the editorial policy of THE JOURNAL for publishing Dr. McCormick's article entitled "Planned Parenthood —The Road to National Health and World Peace?"

I read it with a great deal of interest and shall read it again with more care. It is beside the point whether I find myself in complete accord with all his conclusions or not. It impresses me as being the conscientious thinking of a man who has devoted much time and effort in its preparation. As such, it deserves equally careful and conscientious study by a mind that has tolerance for the views of others.

Naturally, an article of this sort will not be universally acclaimed as correct in every detail. I do not think that Dr. McCormick expected it to be so received. However, any criticism to be effective must be something beside the quoting of dogmatic doctrine from a source that has many black marks on its record during the ages it has been responsible for attempting to direct the thinking of its devotees.

This is not written with the idea of publication in the "Voice of Medicine," but is written simply to congratulate the Editors and the Editorial Board on their good taste in publishing Dr. McCormick's article.

Sincerely,

MINOR MILLER, M.D.
Evansville, Indiana.

(Editor's Note: The above subject has been thoroughly discussed, pro and con, in this column. Therefore, with publication of this letter, the discussion is now considered closed.)

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THE JOURNAL'S PLATFORM

1. **Preservation of American Medicine through voluntary service to the sick.**
2. **Advocating full-time county health officers, locally appointed.**
3. **Restoration and preservation of our natural waters and resources.**
4. **Maintain the present high standard of the Indiana University Medical Center, combining the full medical course in Indianapolis.**
5. **Elimination of diphtheria and smallpox through immunization and vaccination.**
6. **Support of the state-wide campaign against undulant fever.**

Editorials

MEDICAL PREPAREDNESS

SINCE its inception at the Atlantic City Session of the American Medical Association in June 1947, the Council on National Emergency Medical Service has done a tremendous amount of work toward determining the extent of the problem of medical care during a national emergency. This council has also, during the same period of time, entered into the planning phase, and is submitting recommendations to the Board of Trustees of the American Medical Association in regard to continuous national planning.

The magnitude of the problem of organizing and furnishing medical care for large numbers of people in a catastrophic emergency so impressed the House of Delegates last June that a standing committee was authorized. This committee is known as the Council on National Emergency Medical Service. Its secretary, Dr. Richard L. Meiling, of Columbus, Ohio, reported on the activities of the Council at the Secretaries' Conference, February 15, 1948.*

Planning was initiated by conferences with cabinet officials, industrial leaders and staff officers of the armed services. Data thus obtained have been the basis for continuous study by members of the council, and a full report was made to representatives of the state medical societies at a meeting held in Chicago on the fifth and sixth of April.

The possibility of total warfare with the advent of special weapons makes the study of emergency medical service especially important. It is evident that the use of atomic missiles or bacteriological weapons against large centers of population would produce situations which would be far beyond the capabilities of any civilian defense medical organization which has existed in the past. Such medi-

* This report is carried in this issue.

cal units in the future must be more tightly organized and must be much more adequately equipped. Due to the massive destruction possible as a result of atomic bombs and due to the widespread effectiveness of some types of bacteriological warfare, the study of buildings suitable for medical use should be carried out over a wide area. Medical planning must also include study of transportation facilities, and the effects of disruption of water supply and sewage disposal systems.

One of the most important aspects of preparedness for such disagreeable situations is the matter of education. Dissemination of the medical knowledge which has been accumulated to date has been undertaken originally by the armed services. Courses on "The Medical Aspects of Atomic Explosions" are now being conducted by officers of the Army and Navy and civilian scientists under the sponsorship of the Surgeon General, Department of the Army. Enrollment for the successive five-day presentations have included more and more civilian physicians. Medical schools and medical societies are being invited to send representatives, in order to allow for the organization of postgraduate courses in treatment of atomic casualties and the eventual instruction of all doctors of medicine.

Since a significant part of the effectiveness of the newer special weapons will consist of the disorganization and panic which they will impose on the uninstructed populace, a very important part of the educational program will consist of educating the public in all walks of life on what may be expected if atomic or bacteriological weapons are used against us.

Because of the overwhelming burden of medical care which total warfare would present to the medical profession, it is evident that the most efficient use of medical talent would be a vital necessity. It is essential that plans must be made with sufficient detail to permit the definite prior assignment of tasks for every available physician. The peacetime training of nonmedical assistants is an item which may well be included in any preparedness program.

DR. McCULLOCH "RETIRES"

WE grinned real broadly, the other day, when we read this headline in an Indianapolis newspaper. Why, the very idea of Carleton B. McCulloch retiring! He may drop this or that appointment—he may decide to slow up a bit, but as for "retiring," well, that is another matter—he just won't do such a thing!

We have known that man for at least four decades, during which time we never have ceased to marvel at his tremendous energy—always doing things worth-while, yet finding time for a bit of "play."

The son of a Wisconsin minister, he was born in Sheboygan, Wisconsin, in 1871. Later on, his father took over an Indianapolis church and Dr. McCulloch has lived there ever since.

Having quite a literary mind, it is but natural that his associates in the years past have been James Whitcomb Riley, Booth Tarkington, Meredith Nicholson, George Ade, John T. McCutcheon and Claude G. Bowers, along with many of the "lesser lights" in the long list of Indiana writers.

Along about 1900 he began making some life insurance examinations for the State Life Insurance Company, of Indianapolis, and two years later he was named as Assistant Medical Director to the late Dr. Allison Maxwell. Of course this appointment moved him into the home office, where he has been through all the succeeding years. In 1915, following the death of Dr. Maxwell, he succeeded to the title of Medical Director.

His has been a colorful career, not the least important incident in a busy life being his Army record. At the outbreak of World War I he enlisted as a captain in the Medical Corps. Later, when Lilly Base Hospital No. 32 was formed, he was named as an officer therein, with the title of major. He became a colonel in 1918. Among his decorations is that of the French croix de guerre.

Commemorating some of his experiences, Dr. McCulloch wrote a little book, "Memorobilia," recounting some of his experiences in 1917.

Politically a Democrat, Dr. McCulloch was twice the standard-bearer of his party for the office of Governor of the State of Indiana, both times being defeated, in 1920 and 1924. (This incident, however, is no reflection on the candidate, for at that time Indiana was a "rock-ribbed" Republican state.)

It is in this connection that some good stories might be told, regarding the activities of a medical group in his behalf. One letter in particular aroused the opposition no end and, it may be said, had to do with the naming of two new members of one of our state boards.

Our admiration for the man is of the "intense" variety; as we have said, we have known him a long time and have had many occasions to enjoy his company. We are pleased to note that his connection with the State Life organization is not to be entirely severed, since he will hold an office in that organization. It would be hard to remember Washington Street and the State Life Building without seeing Dr. McCulloch about.

THE RETURN OF THE "MONON"

JUST a few years ago THE JOURNAL wailed long and loudly over the "passing" of Indiana's only railroad—not that there were not other railroads traversing our state, but because the Monon was an Indiana institution—every mile of its track was within our borders—from the Illinois state line, in Lake County, to the Ohio river, at New Albany; it was an *Indiana* railroad!

But it fell into evil days, as well as into evil hands, hands that sought to bring about its end.

But, finally, a good fairy, by the name of Barringer, came along and took over. He had some very modernistic ideas about railroads and, although a young man, he seemed to know the way out. So it is that as of today, Indiana's pet railroad project again becomes our very own.

He evidently knew that he was taking over a shamble, but that did not deter him; he had an idea and has put it over. First thing he did was to rebuild much of the right of way; bring the bridges up to a sense of normalcy, eliminate this and that curve, clean up the stations and make the property look like a real railroad.

He bought a large number of Pullman hospital cars and rebuilt them into modern, streamlined cars. Then came his greatest coup—*he Dieselized everything!* As a result, when a 1948 Monon passenger train comes along you will see the latest of all the good things in modern railroading.

Just now he seems content to maintain the usual time schedules, but later, so he announced, this will be stepped up materially. Right now, with John L. Lewis telling us that we just can't have soft coal, most railroads are forced to cut their trains just 25 per cent. This means a hardship in many instances, but those using the Monon for transportation are most fortunate, since all trains, being of the Diesel variety, are operating on regular schedule.

American railroads could use a few more men like Barringer—men of vision—men of ability. Down East there appears to be another such man, named Young, who has done much to revolutionize railroad travel. But right this minute, Indiana is content to sit and bask in the accomplishments of Barringer, who has given the Monon back to us!

HOOSIER HIGHWAYS

FOR many years past Indiana folk have enjoyed our reputation of having one of the best highway systems in the country; in fact, our system has been that good that highway engineers from all over the country have come here to study just how this has been brought about. And it has been a long road to travel, this thing of making Indiana highways notable.

Our first recollection of Indiana roads dates back to our childhood days, back in our beloved Wild Cat country, where we were born. The road past our home was just a plain, "dirt" road, receiving attention—scant at that—just once a year, when every able bodied man was required to put in one day a year on our roads, else he was required to pay the local trustee one dollar, this to pay for a substitute.

In those days the road work consisted of piling the dirt into a center heap, with little attention to drainage of any sort. In a few weeks the dirt had leveled off, and in rainy weather soon became a quagmire.

Then someone discovered that he had a gravel pit in his neighborhood and this material was used to build up the roads. Later on, someone found how to make "macadam," and this proved to be of benefit—if funds could be found to provide it. Still later, cement came to be a rather common commodity and it was not long before our roads began to take a somewhat permanent form.

Then along came the gasoline tax and the formation of the State Highway Commission; it was then that roads began to be *roads*, and in no time Indiana led most other states in the building of these highways. And, it should be remembered, all this was being done without a state bond issue, such as was necessary in most other communities. (Indiana does not have any "truck" with bond issues; since 1916, there never has been one issued; we just pay our bills as we go along!)

Well, we began to get roads and new bridges and the first thing we knew, we had a lot of four-lane highways. Nor was the aesthetic element forgotten; many of our roadsides were landscaped, after a fashion; trees were planted and many a shady nook offered a dining spot for travelers. The roads were numbered and sign boards told us where to make this or that turn. These signs also told us, in advance, of curves in the road and at what speed to take them. In all, we had a *real* system.

But during the war we were unable to keep these highways in first-class repair; they were taking a terrific beating, chiefly from the huge trucks that passed over them daily. But war was war, and we had to sit by and see the damage being done.

But now that the war is over we find the overloaded trucks still ply our highways; some of them resemble huge freight cars—which they really are.

The commission, long alert to the situation, finally has become hard-fisted; they are weighing these "freight trains" and making arrests.

At first, the average "J. P. Court" assessed a nominal fine, say $25.00; but of late these cases are being taken to other courts, where the fines have run as high as $500. This latter program will of course have much to do with curbing the overweight program of many truck companies.

We just cannot refrain from commenting on the fact that the "right of way" of these trucking outfits is maintained by the state of Indiana, while ordinary freight trains run over tracks maintained by the railroad corporation. Then, too, it is our opinion that railroad taxes are much higher than those assessed on trucking companies.

Now, what has all this to do with our profession? A lot; first, in the matter of personal taxes; but the chief thing is the fact that the Indiana highway system affords us means of extending the area in which we practice. Back in the old days a "trip out in the country" meant a half day or more; today, it is a matter of but a few minutes—and we know we are going to get there!

So it is that we are in full accord with the slogan—"Save Indiana Highways!"

Editorial Notes

Through a good many years in the practice of our profession we have constantly urged that the "younger men" of the profession be given assignments in local county society organizations. Too often we have noted that the older men are named again and again as officers and what-not.

But in recent years, as we look over the rosters, we find that, at long last, the young men are appearing in large numbers.

Not that we favor a complete set of new officers and committeemen from the young chaps—we need a "sprinkling" of the older group to keep things going; but the fact remains that after due time the old "wheel horses" will be unable to continue as heads and here is where the younger men, properly trained, will come in mighty handy.

The city of Muncie and Delaware County apparently are considering a county-wide health officer program, such as THE JOURNAL has been advocating for several years past. Recently there was a program held in Muncie, the chief speaker being Dr. Milton J. Roemer, a surgeon of the United States Public Health Service.

He outlined what he thought to be a proper program for that particular community, stressing the fact that such program, while of inestimable benefit to everyone in the area, need not be *too* much of a financial burden.

Right now, we believe, is the proper time to publicize the idea of a coordinated health service; certain it is that Mr. and Mrs. John Q. Public are health-minded. Certainly it is better that such programs come from organized medicine than from all the "Falks" in the country—and there seems to be a lot of the latter!

The general interest in the subject of psychiatry seems to continue, unabated. Every little while we learn that some one of our societies has had such a program, the most recent to come to our attention being that of the Jackson County group, which was addressed by Dr. Louis Foltz, of Louisville, speaking on "The Early Symptoms of Psychosis."

Many are of the opinion that this interest is a "hang-over" from the recent war. There may be some truth in such opinions, since many of our younger men saw just enough of psychiatry during their service to wish to make it a life profession.

We know of few phases of medicine in which there have been more marked advances during the past few years; cases that formerly were classed as totally incurable are now being materially helped and many of them are being returned to society, with every assurance that they can carry on in a normal manner.

Over in Madison County, where the local medical society recently voted to start a campaign for the recruitment of nurses for St. John's Hospital, at Anderson, the local committee has inaugurated what seems to us a very wise program. This consists of having nursing groups visit the various high schools of the area and give programs such as will be of interest to the young women about to graduate.

Talks by medical men, while of much value, do not have the appeal of those given by real, live, practicing nurses. It is our belief that such a program will bring about very beneficial results.

Communities having pre-school clinic programs already are making their plans for next September. This is as it should be. There is no reason for delaying such examinations until just a few weeks before school opens.

And at the same time we urge the inclusion of the little tots, those who will enter the kindergarten schools at that time. In our experience many of the little folk have defects that, taken care of early, will obviate much distress later on.

Especially is this true in eye examinations. In many instances we have found what commonly is termed "a lazy eye," meaning one that through lack of proper development is not functioning as it should. Early recognition and treatment of such conditions will do much to restore useful vision in such cases.

Vernon C. Anderson, the new mayor of Hammond, evidently has some ideas of his own regarding health matters. He recently appointed a new City Board of Health, consisting of five members, each an outstanding member of the local medical profession. These men got busy and in a short time had developed what appears to us to be a *real* health program.

First of all, they united the civic and school city in a joint program, then went on to seek a man to head up the program. They finally selected Dr. Frederick A. Mussachio, of Laredo, Texas, for this post, arranging to pay him a salary of $8,500 per year for his work.

The doctor comes to Indiana after a long experience in health work, well trained in that phase of the profession. In passing, we might say that the program has the full endorsement of the Indiana State Board of Health.

The local board announces that one of the many points in the local program is an at-last honest effort to "clean up" the eating spots of the city. For a long time it has been recognized that health rules, as applied to these places, have been misnomers and we hope that here we have at least a starting point in the right direction.

The new plan—and it is just that—will be watched with the greatest of interest by all concerned in health matters. It is said that "politics" will have absolutely no place in any *phase* of the program.

President's Page

DISTRICT MEDICAL MEETINGS

THIS is the time of year when most councilor districts hold their annual meetings. The President, Executive Secretary, and/or the President-Elect will attend these meetings when possible. The councilor is a very important member of our state organization, and the councilor district should be a much more important link in connecting adjacent county medical societies together and uniting them with the state organization. One or two councilor districts hold meetings twice a year, while the others hold only one. It would seem that the councilor districts should give consideration to the desirability of holding at least two or more meetings a year and that more time be given to the discussion of the many social, political and economic problems as they relate to medicine. The councilor should keep the district fully informed about the activities of the state association and the members of that district should make known to their councilor their views concerning the present day problems. The officers of the state association are keenly aware of the need of a more united profession, and of the necessity of a closely knit organization, for the purpose of presenting the views of our profession, and exerting the proper influence in shaping present trends in medical practice.

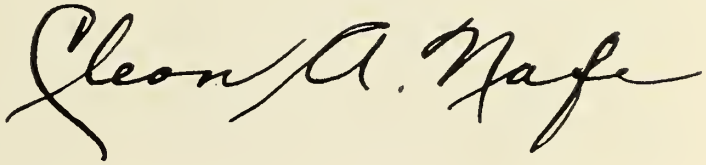
I believe that most of our physicians are conscious of the necessity for aggressive leadership by our profession, and wish to do their part. It is our duty as officers to furnish them that opportunity. Many of our county societies have initiated ambitious postgraduate programs in cooperation with Indiana University. The state medical association, through its Committee on Medical Education and Hospitals, wishes to encourage and help with these programs. The most pressing problem that confronts the medical profession today is how to direct properly the course of legislative events so that our present standards of the private practice of medicine may be continued and improved. Therefore, I would urge that more time be given on these society programs for a discussion of these problems and of ways and means to improve our public relations.

Physicians are vitally interested in these subjects and it is a healthy sign that many of our medical societies are scheduling a full evening for a discussion of these social and economic problems. Recently the Indianapolis Medical Society devoted one meeting to the discussion of the subject of Public Relations, with Lester H. Perry, Executive Secretary of the Medical Society of the State of Pennsylvania as the chief speaker. On May 27 the Vanderburgh County Medical Society, in conjunction with the First Councilor District, is devoting a considerable period of time to medical economics.

INCREASED HEADQUARTERS PERSONNEL

In order that our state medical association can be of more service in correlating the activities of the various medical societies of our state, the officers of the association have recognized that our headquarters staff must be enlarged. We have thirty-five committees that are anxious and willing to function, but they need a larger executive staff to enable them to do these jobs well. The Committee on Medical Education and Hospitals has recommended the employment of a field secretary to implement the program of postgraduate education. The Committee on Public Policy and Legislation desires additional help, to do a better job in outlining and directing a legislative program. The Committee on Public Relations wishes to inaugurate a program designed to supply the physicians with a better understanding of the problems of public relations. The Committee on Rural Medical Care wishes to arrive at a better understanding with the various farm groups of what measures may be adopted to meet the needs of the farm groups with regard to a better health program. Other committees are likewise very active.

The Council recognized the need for further aid in carrying out this program and has authorized the Executive Committee to select applicants for an Assistant Executive Secretary, and expects to employ such a person at a subsequent meeting. Our present staff has done a swell job, but its hours in the day are limited. The suggested addition to our headquarters staff will keep our association in line with neighboring state organizations, which have rapidly expanded their staffs to a much larger size. I feel sure that the members of our association will heartily endorse this action by the Council.



PROPHYLAXIS AGAINST OPHTHALMIA NEONATORUM

GEORGE M. BROTHER, M.D.*

INDIANAPOLIS

DURING the last few weeks numerous inquiries have been received at the State Board of Health regarding the legal requirements for prophylaxis against ophthalmia neonatorum. Since these inquiries followed shortly the publication of a lengthy article on the subject in a leading popular magazine, it would appear that the article has been responsible for the sudden questioning by the lay public of a medical procedure which has been highly effective in accomplishing its objective—the prevention of infant blindness.

Unfortunately, the article referred to above was so worded as to give the impression that the use of silver nitrate as a prophylaxis against ophthalmia neonatorum was a crude, out-moded and entirely unnecessary practice, and that there existed a sinister conspiracy to prevent the use of penicillin, which the article intimated was the ideal drug, devoid of any danger and a hundred per cent effective. Although writers for popular magazines may be forgiven for introducing a certain amount of sensationalism into their work, it is unfortunate that the implications were given that the use of penicillin was absolutely foolproof and that it would require public pressure to force the adoption of this method of treatment. Already, demands have been received from laymen for "new legislation to correct such a cruel thing being done to our children." The inference that the eyesight of hundreds of newborn babies is being threatened daily by the use of silver nitrate is certainly without foundation, in Indiana at least, for no record of permanent eye damage due to the use of silver nitrate can be found.

It is the purpose of this short report to state the legal provisions in Indiana for prophylaxis against ophthalmia neonatorum and to indicate the current viewpoints of numerous medical authorities who have been consulted on the subject.

The first legislation in Indiana concerning prophylaxis against ophthalmia neonatorum was enacted in 1911 in Chapter 129, which is known as The Prevention of Infant Blindness Law. In brief, this law requires that all physicians or midwives in professional attendance upon a birth shall always answer the question on the birth certificate "Were precautions taken against ophthalmia neonatorum?" It further provides that such professional attendants upon a birth shall always carefully examine the eyes of the infant and if there is the least reason for suspecting infection of one or both eyes, then said physician or midwife in professional attendance shall apply such prophylactic treatment as may be recognized as efficient in medical science. In addition to the statute, the State Board of Health requires compliance with its Regulation HCD 32, which provides in brief that the attending physician, midwife, nurse, or other person in attendance on a confinement shall meticulously employ Credé's method in the prevention of ophthalmia neonatorum. Credé's method, referred to in this regulation, is understood to be the instillation of one drop of 1% silver nitrate solution in each eye, or one drop of 2% solution of silver nitrate in each eye, followed shortly by irrigation with normal saline solution.

Although penicillin has been shown to be an effective drug for this purpose,[1] there are several practical reasons why the regulations have not been changed to provide for the use of other drugs besides silver nitrate solution. In the first place, solutions of penicillin require refrigeration and must be made up fresh at short intervals. There is grave danger in the use of old, ineffective solutions of penicillin. Furthermore, to be effective as a prophylaxis against ophthalmia neonatorum, penicillin requires multiple instillations. In addition to the above points for consideration, it is known that penicillin used locally not infrequently sensitizes the patient so that the drug cannot be used safely for other diseases thereafter. Most of the ophthalmologists and obstetricians interviewed feel that the use of 1% silver nitrate solution still has the advantage of proven effectiveness, ready availability, and the fact that it requires but a single application. The one danger of its use, which is the possibility of concentration of the solution, has been overcome by the almost universal use of the commercially prepared wax ampules of 1% silver nitrate.

In view of the broad provisions of our Prevention of Infant Blindness law of 1911, which requires application of "such prophylactic treatment as may be recognized as efficient in medical science," it is apparent that no new legislation is needed in Indiana in order to utilize the best possible method which medical science has to offer. Undoubtedly, the State Board of Health will readily change its present regulation, which requires the use of silver nitrate solution, just as soon as it is apparent that penicillin solutions or other drugs can be used throughout the state in both home and hospital with the same degree of effectiveness and safety as silver nitrate. Until that time, it would not appear to be sound judgment to abandon a proven method in favor of other methods which are still not adaptable to widespread use.

* Director of Preventive Medicine, Indiana State Board of Health.

1. Franklin, H. C.: J.A.M.A., 134:1230, 1947.
Franklin, H. C.: Military Surgeon, 102:179, 1948.

THE PROGRAM OF THE COUNCIL ON NATIONAL EMERGENCY MEDICAL SERVICE*

RICHARD L. MEILING, M.D.†

COLUMBUS, OHIO

YOUR invitation to me to address you today indicates an interest in the work of the Council on National Emergency Medical Service which is not only gratifying but deeply appreciated by each of the members of the council. As you well know we are the youngest of the nine councils of the American Medical Association. Our work is of vital interest to every citizen of the United States and to all members of the medical and allied professions.

The executive and legislative branches of our government are currently considering the appropriation of eleven billion dollars for the national defense establishment (roughly 28 per cent of the 1948-49 budget). It is estimated that by 1952 this sum will exceed eighteen billion dollars annually. If it is true that "dollars talk," these staggering sums alone should arouse the interest of each of us in the national defense program, and in our individual protection in time of a national emergency. Yet today there is no medical coordinating agency or special mechanism having governmental recognition in existence for the formulation or consideration of policies, programs and plans dealing specifically with the medical, health and sanitary services required on an overall national scope in time of a national emergency.

The House of Delegates of the American Medical Association, cognizant of this situation, in June of 1947 authorized the establishment of a standing committee of the Board of Trustees, to be known as the Council on National Emergency Medical Service. This council is appointed by the Board of Trustees and reports all its activities to the board. On December 11, 1947, this council held its organization meeting and embarked upon its program under the chairmanship of Dr. James C. Sargent of Milwaukee.

It is the purpose of the council to make continuing studies of the multitude of problems related to the medical, health and sanitary services required by the civilian population, industry, agriculture, as well as the armed forces, in time of national emergency. Periodic reports are submitted to the Board of Trustees and, depending upon their action and recommendations, policies, programs and plans will then be developed for the American Medical Association. It is not contemplated that this council should ever be required to serve as an administrative or operating agency during any phase of a national emergency.

It is needless for me to recite the stories which the daily press and popular periodicals present on the gruesome details of the horrors of atomic warfare, supersonic missiles, bacteriological warfare and the phantasies involved in the tales of the "push button" war of tomorrow.

As doctors and scientists we are face to face each day with the destructive forces of disease and we do not turn in panic from our mission of saving life and caring for the patient. Let us, therefore, plant both feet firmly on solid ground and appraise the situation which confronts us in relation to this, the medical problem of national defense.

World War II ended once and for all time the old concept of war, that of the segregated battlefield and the geographical border defenses—be the borders oceans, mountains or a Maginot Line—and replaced it with the concept of the "war of areas."

What do we mean by a "war of areas?"

These "areas" are the national nerve centers of the enemy nation, chief among which are the great cities and the sprawling industrial complexes (such as our auto industry complex around Detroit or the steel industry complex around Pittsburgh), with their agglomeration of humanity dependent for light, heat, water, food, sanitation, communications, transportation, housing and medical services upon complicated centralized mechanical organs. The latter might well be compared to a gigantic steel heart and its accompanying vascular system—and, not unlike the human cardiovascular system, is vulnerable to attack by specific yet small destructive forces.

During a "war of areas" the civilian population, the industrial workers and the members of the armed forces are targets of the enemy's destructive forces directed at the devastation of the national nerve centers. THERE IS NO ABSENTEEISM OR DEFERMENT FOR ANY ELEMENT OF THE POPULATION in this type of war. We must profit by the experience of England and the European countries as they struggled to improvise medical defenses during the years 1939 to 1945. NO NATION WINS A WAR—BUT THE PENALTY OF DEFEAT IN MODERN WAR IS TOTAL NATIONAL DESTRUCTION.

The following are but a few of the more pressing problems now under consideration by the Council on National Emergency Medical Service.

National Defense Planning. Mr. Arthur Hill, Chairman of the National Security Resources

* Presented before the annual Secretaries' Conference of the Indiana State Medical Association at Indianapolis, February 15, 1948.

† Secretary, Council on National Emergency Medical Service, A.M.A.

Board, has met with members of the council in a general discussion of the medical problems involved in a coordinated civilian, industrial and armed forces mobilization. This board, created by the National Defense Act of 1947 (Public Law 253), is responsible by law for the coordination of such a mobilization.

Armed Forces. Mr. James Forrestal, Secretary of Defense, as well as Mr. Sullivan, Secretary of Navy, and Mr. Symington, Secretary of Air Force, have received members of the council for discussion of the immediate and future problems of the medical services of the Army, Navy and Air Force. The Committee on Civilian Components, Office of the Secretary of Defense, has asked the American Medical Association for suggestions and a medical program for the reserve components of the armed forces.

National Security Training (Universal Military Training). A conference between various representatives of the government, the armed forces, the Association of American Medical Colleges, the Society of Medical Consultants of World War II, and members of the council was held in December to consider the medical requirements in personnel and facilities the enactment of this type of federal legislation may well involve.

The many variables and "assumptions for planning purposes only" require an accurate knowledge of the subject and continued study. Numerous queries have arisen with reference to the alleged shortage of doctors in this country. This problem has been referred to the American Medical Association Council on Medical Education and Hospitals and to the Association of American Medical Colleges. Thus you may see that it is the policy of the council to utilize fully all available authoritative sources and groups in our work and studies.

We have directed inquiries to each of the forty-eight states and the four territories with regard to the development of a State War Disaster Service. Copies of the letters sent to each of the governors have at the same time been sent to the secretaries of the respective state medical associations, so that in all our work the state medical associations may be fully informed.

The subcommittee of the Council for Allied Health Agencies is planning a joint meeting between representatives of the national medical and allied agencies and organizations, to discuss the specific problems of each and then the development of a coordinated program for all.

The Subcommittee on Professional and Lay Education on the medical aspects of the special weapons, such as atom bombs, bacteriological warfare, etc., anticipates the development of an educational program which will keep the doctors abreast of the times and yet not bore them with the distasteful subject, "war medicine."

The subject of National Disaster Relief is the work of still another subcommittee, involving the programs of the national, regional, state and local relief agencies. The crossing of state and county lines of responsibility, as you well know, demands considerable tact, understanding and diplomacy, as well as great patience.

The problems relating to medical education, medical research, medical supplies and equipment, utilization of hospital facilities, and a host of equally important subjects have not as yet been selected for detailed study due to the urgency and pressure of the problems under current consideration.

We have not forgotten the fact that in 1946-47 the various state medical associations organized state committees on National Emergency Medical Service. We beg of you to be tolerant and patient. We hope soon to join with the other American Medical Association Councils in joint programs and regional meetings. We realize full well that each state association is confronted with special problems peculiar to its own state political and geographical situations. We do feel that the experience of the several state committees will be of inestimable aid to the others and particularly to our council in its national work.

Our initial objective is the appointment of representative national medical leaders and authorities in the medical and allied fields to advise and assist the National Security Resources Board in the consideration of this prospective medical problem. Such a group of consultants would be directly responsible to the National Security Resource Board and could perform its functions on a part-time basis. Thus our nation, with the limited total medical resources available, will be capable of providing the best possible overall medical coverage under all contingencies of an acute national emergency.

The role of the doctor in time of national emergency as in time of peace must be that of an advisor. His advice must be logical. His advice must be medically and scientifically correct. His advice must be heard. We count upon each of you to see that the advice of the Council on National Emergency Medical Service is heard and heeded throughout all levels of our government.

150 E. Broad St., Columbus 15, Ohio

QUANTITATIVE SEROLOGY AND SYPHILIS*

Part III—Serologic Follow-up on Patients Treated for Syphilis by a Short Intensive Method

Carl C. Kuehn, M.D.

Samuel R. Damon, Ph.D.

INDIANAPOLIS

SHORT intensive methods for the treatment of syphilis have greatly increased the significance of the serologic *pattern* produced in the patient. Serological and clinical data accumulated by rapid treatment centers during the past few years indicate that the amount of treatment given by these methods suffices in the majority of cases to:

(1) Bring about permanent clinical and serologic negativity in most patients presenting symptoms and signs of primary or secondary syphilis at the start of treatment.

(2) Bring about permanent clinical negativity in patients treated later in the course of their disease, *although the blood test may remain positive.*

Patients diagnosed "primary" or "secondary" syphilis should be quantitated at the start of intensive treatment and should have a clinical examination and quantitative blood test repeated at the following intervals: at one month intervals for the first six months following the completion of treatment; at two month intervals for the next six months; at three month intervals during the second year and annually following the second year of observation.

At each physical examination during the first three years following treatment, special attention should be paid to the skin and mucous membranes for evidence of infectious relapse. Examinations carried out beyond three years after treatment should emphasize careful clinical survey of the cardiovascular and central nervous systems. Blood should be drawn at each re-examination for a quantitative serologic test for syphilis. Every effort should be made to perform a spinal fluid examination approximately one year after the end of treatment.

In the favorable cases observed so far, a continuous decline in titer of the quantitative test is noted, the test becoming negative six to twelve months after treatment and remaining negative thereafter. Should clear-cut evidence of clinical relapse or other syphilitic manifestations be found on physical examination; or should the titer of the quantitative blood test increase *significantly*, it would be apparent that the treatment had failed to cure. *However*, because of fluctuations in the sensitivity of serologic tests, two- to four-fold increase in the strength of the quantitative test *may* not be an indication of serologic relapse.

Repeated tests are necessary to verify a definite increase in titer. Unless the laboratory evidence of increasing strength of the quantitative test is absolutely clear-cut, further treatment should not be given. If, in the clinician's opinion, based on such follow-up, clinical or serologic relapse has actually occurred, further antisyphilitic treatment is, of course, indicated.

In patients with a diagnosis other than primary or secondary syphilis at the start of treatment, clinical and serologic re-examination similar to that indicated above should be made at six month intervals for the first two years and at one year intervals thereafter. Further treatment should be given should new clinical manifestations appear. Serologic evidence of relapse is not so easily gained in this group and treatment should not be re-instituted unless a very marked increase in the titer of the quantitative blood test occurs. Should spinal fluid examination not already have been performed, every effort should be made to carry out this examination six months following treatment.

SUMMARY

Three short articles on the interpretation of blood tests for syphilis, particularly with respect to quantitation, have been presented.

Part one was devoted to an attempt to clarify common misconceptions regarding the reading of quantitation into qualitative serologic tests for syphilis.

Part two discussed the use of quantitation as a diagnostic aid.

Part three outlined procedures for posttreatment follow-up after using a short intensive antisyphilitic treatment schedule.

* This is the third in a series of three articles on Serology in Syphilis appearing in three consecutive issues of The Journal.

SUBJECTIVITY AND OBJECTIVITY IN MEDICINE AND SURGERY

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INDIANAPOLIS

THE practice of medicine and surgery is an art based upon and aided by the sciences.

The field of medicine and surgery, through intensive specialization, has invaded nearly all of the arts and sciences, to their mutual enrichment and benefit.

The subject matter of medicine and surgery has also become inclusive of the sciences, arts, human relationships such as sociology and criminology, industry, religion, politics, international affairs, peace and war, in its highly successful attempt to serve the needs of a highly organized and expanding civilization.

The one constant, the one element binding medicine and surgery to this sum total of human activities and relations is the scope of their endeavor to achieve human welfare of body and mind through the prevention, control and cure of disease so that man may continue to exist in equilibrium with and have mastery over his surroundings.

The doctor directs his best efforts for the good of the individual patient. Medical education, ethics and practice, with all the modern complex medical organization, are built upon the ideal of service to the individual patient. This is democracy in principle and in practice at its best. The welfare of society is advanced to the extent that the welfare of the individual is safeguarded.

In recent years, however, medicine and surgery have become the servants not only of the individual but of the group: the school, factory, city, county, state and nation; the Army, Navy, Air and Public Health Services; limited and nation-wide insurance groups; all of which exact from their respective medical services primarily the promotion of the welfare of the respective services or groups, and secondarily the welfare of the individual. At times the interests of both coincide, otherwise the interest of the group takes precedence. At best the individual welfare comes within the framework of interest of the particular group. Insurance groups, too, must protect their interests in order to exist.

Recently certain well-meaning and idealistic groups within organized medicine and associated medical services have become overzealous in attempts to raise standards and create scientific efficiency. They have done so at the expense of the best interests of the individual patient. They have placed the interest of the special society or staff or hospital or board above that of the individual patient who just wants a doctor who can help him when he seeks help.

In the first case, where the individual patient seeks help from an individual doctor, the relationship is at once subjective, and all factors of family relations, social status, physical and psychological background become factors in the subjective considerations and the subjective relationship between doctor and patient. Courtesy, directness, sincerity, truthfulness, kindness and sympathy help to establish faith and confidence, mutual respect, interest and cooperation.

This background of a purely subjective nature is essential in the evaluation of the case and the decision as to the best means of treatment possible under the circumstances. The disease, the symptoms and signs, diagnostic tests and the choice of therapeutic measures are then considered objectively as causes, effects and instrumental methods. They are then properly classified and evaluated objectively. The possible or probable results are anticipated or forecast in prognosis, objectively at first in respect to experience and statistical data, then subjectively as applied to the particular patient, estimating the benefits to be derived.

In the second case, where the group commands and institutes the care and treatment of the patient, the subjective approach to the patient is often completely lost, the relationship between doctor and patient as a rule becomes at once objective. Often the evaluation of the case must coincide in dollars and cents to the capacities and policies of the group furnishing the service, the case of the individual becomes one of objective consideration from beginning to end, subject only to the often biased interpretation of policy by a zealous servant of the group.

Experience is sufficient to indicate that the larger the group the more objective its service tends to become. However, this is not a condemnation of all groups furnishing medical service. Liberalism and humanism are attributes of individuals; enlightened self-interest often dictates policies serving equally well the group and the individual. Most larger groups have recognized the necessity of public relations officers who attempt to minimize the impact of purely objective relations on the individual and the general public.

While the subjective relationship between patient and doctor is ideal and has proven successful both in principle and in practice through the centuries, it would be presumptuous to condemn utterly the efforts of group medical controls. It is rather the purpose of this paper to point out the place and importance of subjective and objective relationships so that the dispenser of medicine and surgery to the individual as well as the group may do so with some

measure of feeling inherent in subjective relations so important to the individual patient.

It is also my hope that a general appreciation of the good in subjective relationship between doctor and patient would help halt the headlong precipitous advance of the so-called socialized medicine, which in spite of promises of voluntary choice of service would undoubtedly destroy the last vestiges of a time proven democratic principle in the practice of medicine holding the good of the individual as paramount.

We must continue to hold the individual welfare of the patient and service to the individual above all. This should be the arbitrary yardstick for all medical theory and practice as well as for every unit of its complex organization. We can best serve this purpose by maintaining a subjective personal relationship between doctor and patient.

NEW PROFESSIONAL TRAINING OPPORTUNITY OFFERED ARMY DOCTORS

A REVISED and greatly expanded professional training program for regular Army and Reserve Medical Officers was announced today by Major General Raymond W. Bliss, Surgeon General of the Army. In line with the policy of providing in the U. S. Army the highest standard of medical care in the world, the program calls for 1900 new doctors in the Regular Army and an increasing number of volunteer Reserve officers on active duty. The program is designed to give many more Army doctors the training needed to meet the requirements for certification by the American Specialty Boards, and to further integrate civilian and military medicine. The new program will facilitate the classification and career management system already in practice in the Medical Corps whereby every effort is made to assign professional officers to posts where they can practice in their special fields of interest.

Five major aspects of the new training program were described by the Surgeon General:

(1) Physicians already resident in civilian hospitals are now eligible for commissions in the Regular Army. Those commissioned may continue their residencies with full pay and allowances from the Army and will be assigned by the Army to the civilian hospital in which they are already resident. Even in the event of a major emergency, residents will complete their training, if it is at all possible. Chances of continuing training for these men will be at least as good as those of civilian doctors in resident training. The Surgeon General's Office will commission 300 residents under this aspect of the program in 1948, 300 in 1949—50 as senior residents, 100 as residents and 150 as junior residents.

(2) Civilian interns are now eligible for Army Medical Corps Reserve commissions, and may continue their internship with full Army pay and allowances. Those so commissioned will undertake to accept a commission in the Regular Army on completion of their internship, and will then be permitted to compete for Army residencies in either Army or civilian hospitals. In 1948 and again in 1949, 300 interns will be included in this phase of the training program.

(3) During 1948 500 younger doctors will be commissioned and assigned to duty at army hospitals in order to compete for 260 residencies in both army and civilian hospitals. Competitive examinations will begin either in September or October 1948. These residencies are apportioned among the various specialties according to the needs of the Army Medical Corps. Resignation of officers commissioned under this phase of the program will not be accepted within one year after the date of commission.

(4) One hundred and fifty commissions in the grades of major, lieutenant colonel and colonel will be offered in 1948 and another 150 in 1949, to doctors who have completed their training. This aspect of the program is not limited to those men already certified as specialists, since outstanding officers for command and staff positions are needed, as well as professional men. Applicants for these commissions in higher grades will not be considered for residencies or specialty training.

(5) Active Reserve Service for specific positions and limited periods will be offered doctors who are not interested in a regular Army career. General announcements for such vacancies will be made from time to time. Those who come into the service in this manner will not be eligible for residencies, but time spent in practice under this aspect of the program may receive recognition by the specialty boards.

The program is designed to attract to a regular Army career medical talent of the highest caliber. One year of active duty as distinguished from training duty is expected for each year of training, whether the training is received in army or civilian institutions. Resignations will not be considered until this obligation has been fulfilled.

Training continuous until completion of the requirements for Specialty Board certification is a definite aim of the program, the Surgeon General emphasized.

The program has been presented to the Council on Medical Education and Hospitals of the American Medical Association and to the Association of American Medical Colleges. Both bodies have officially recognized the value of the program in its entirety.

Information concerning any part of the program may be obtained from the Surgeon General's Office. Address requests to the attention of the Chief of Personnel, SGO, Department of the Army, Washington, D. C.

MASS HYSTERIA NEED NOT FOLLOW ATOMIC BOMB EXPLOSION

IF an atom bomb should fall on an American city, the population would be faced with the greatest emergency in its history, but it is by no means true that the entire population would be wiped out, nor is it true that nothing could be done to help the survivors, according to Army Medical Corps officers who are conducting continuous study of the problem.

There is no presently known method of protecting those in the immediate neighborhood of an atomic bomb when it explodes. Nevertheless, since the Los Alamos experiment opened the Atomic Age, a great deal has been learned about mitigating the secondary effects of ionizing radiation and about protecting survivors who have received less than a lethal dose.

Many lives may be saved by widespread knowledge of therapeutic measures among physicians, and many more by a general understanding of preventive measures which can be taken by the general population.

In a talk made at the Pennsylvania University Hospital, Philadelphia, Colonel James P. Cooney of the Army Medical Corps stressed the question of civilian morale. "Mr. and Mrs. America have been so frightened by the information they have received to date, that if a bomb were dropped on one of our cities tomorrow, mass hysteria would probably cause the unnecessary loss of many lives," Colonel Cooney said. "Mr. and Mrs. America have always been ready and willing to do what must be done in an emergency, and will, if properly instructed beforehand, do the right thing under this new kind of stress."

The real difference between ordinary high explosives and atom bombs is the enormous amount of radiant energy produced by the latter—energy covering the whole range of wave lengths from heat waves to million-volt gamma waves.

The radiant energy may be divided into two types: ionizing and non-ionizing. The most important type of injury noted in Hiroshima and Nagasaki was, of course, that due to the ionizing component of the radiant energy from the bomb. Four known kinds of penetrating radiation can be expected within the immediate area of the blast. They are:

First, gamma radiation, which is essentially the same as x-ray. In an atom bomb explosion, however, these are 200,000,000 volt x-rays. They are lethal to anyone within roughly a mile of the blast, do serious damage to those as close as a mile-and-a-half, but their range is limited to approximately two miles. They move with the speed of light and most of them are produced at the instant of explosion.

Second, neutron beams, streams of heavy atomic particles shot out in all directions within a millionth of a second of the explosion. They have slightly less range than gamma rays. Both gamma rays and neutron beams passing through matter such as blood, bone or flesh, produce extensive ionization of the atoms which make up body cells, which results in the breakdown of chemical bonds, causing profound alterations in cellular function. The fact that some kinds of cells, such as certain types of cancer cells, are affected more easily than others is the basis of radiation therapy. Whatever damage is done in this way is instantaneous, although observable symptoms may not appear for some time.

Neutron beams, however, have another effect, new in medical science. Neutrons are captured in elements contained in human cells, producing new elements which are themselves radioactive, and may remain so for a long time.

Third, are beta rays, streams of electrons which rarely penetrate the skin and whose effects will be found chiefly on the surface; and,

Fourth, are alpha particles, the nucleii of helium atoms, which do not get through the cornified, or horny tissue layer of the skin. Because of their low penetrating power, it is not likely that either the beta rays or the alpha particles resulting directly from the explosion will cause fatal injury.

It must be admitted, Army doctors say, that there is not much even a medical man can do about the immediate radiation from an atom bomb explosion. But in such an eventuality the immediate requirement will be for rescue work on a large scale and treatment for fractures, contusions, lacerations and burns. Here physicians and laymen will be on familiar ground. These kinds of injuries are the same whether produced by an atom bomb or a block buster; they involve no new principles.

Also, some aid may be given to victims of many sorts of secondary radiation dust spread by the explosion, radioactivity caused by neutron captured by atoms, or radioactive spray if the bomb is dropped in water. Against this secondary radiation, various safeguards can be provided, and it is essential that physicians be trained in safety measures. Army, Navy and Atomic Energy Commission scientists, as well as civilians interested in radiation therapy, are hard at work on the problem and substantial progress is being made. One important line of research is in the efficacy of blood transfusions, since it has been established that one of the most serious effects of radiation is damage to the blood-forming elements such as the bone marrow. A person tided over until normal function is resumed may be saved.

A major function of the physician after such a disaster would be to act as public health officer. Most food in the affected area would not be unfit

for consumption, but it would all have to be surveyed before it could safely be eaten. All the water in the region would probably contain radio-active isotopes, slow poison to anyone drinking it, but research is in progress on methods of removing radio-active substances. Obviously the usual boiling or chlorination would be useless. There is some indication that filtration and other methods can be developed.

Physicians would have a heavy responsibility in supervising the decontamination of not only food and water but of refugees, by means of complete change of clothing, bathing, et cetera. This requires familiarity with the use of detecting instruments such as the Geiger counter, and a knowledge of the kinds of persistent radiation to be expected. (People escaping from the area where a bomb has exploded may find their wearing apparel sufficiently radio-active to constitute a menace to others.) This problem has already come up in hospitals where patients are being treated with large amounts of radio-active material.

Armed Forces medical officers face an even greater responsibility than do civilian physicians, since it may be necessary to send troops into a bombed area either for rescue work or on tactical operations. A series of intensive courses on the medical aspects of atomic explosion was instituted last May at the Army Medical Center, Washington, D. C. Nearly 700 doctors and scientists have been trained there in the fundamentals of radiation hazards, diagnosis and treatment. More than 50 medical schools throughout the country have sent representatives, many of whom are now setting up similar courses in their respective institutions.

Following the bombing of Hiroshima and Nagasaki, much was learned of what symptoms to expect, overt and latent, immediate and delayed. All the results will not be in for years, of course. Great publicity has been given to the possibility of gene mutations which might produce a high percentage of abnormal offspring in generations to come. However, Dr. Shields Warren, Assistant Professor of Pathology at the Harvard Medical School, recently told Army doctors attending the current basic science course at the Army Medical Center, Washington, D. C., that aberrations in the genes and ova of mammals produced by irradiation are usually lethal to the developing embryo, and consequently the result of such irradiation would probably be a higher rate of abortion and miscarriage rather than production of a race of monsters pictured in sensational prophecies.

Besides flash burns from enveloping hot gases, such as result from any powerful explosion, blisters similar to skin burns and sunburn are likely to appear on the skin of atom bomb victims. In Japan, burns and blisters appear to follow a definite pattern, showing up within five minutes on those close to the explosion. At nearly a mile away, they did not show for several hours, and at greater distances, up to about two miles, the appearance of burns and blisters was even longer delayed.

Of the superficial effects perhaps the most alarming is the falling out of the hair. While bound to cause a bad psychological effect, it is due to superficial radiation and is not serious in itself. The hair will return if the patient has not received a lethal dose of radiation.

Immediately after a bomb blast those in the vicinity who escape immediate death from shock, burns or falling debris may appear to have suffered no ill effects at first, but within a few hours victims seriously affected will feel nauseated and start to vomit. This may pass in a day or so, but at the beginning of about the second week, when the hair starts to fall out, the feeling of general malaise, experienced in the first few hours, may return, accompanied by fever. There is likely to be bloody diarrhea. Examination will show that the white blood count has fallen to a very low level. Death may come very quickly, or there may be anemia and general debility over a long period, with eventual recovery.

Physicians must be prepared to expect such a syndrome and to take nothing for granted about the condition of the patient during the first few days.

There is a parallel in our experience with heavy bombing of cities from the air in World War II. This type of warfare was an innovation, and at first physicians had virtually no information concerning the effect of shock waves of that magnitude on the human body. Scores of people in the neighborhood of bursting bombs died, although they had apparently suffered no injuries. The knowledge of what could be done to save these people was acquired the hard way because medical science had not foreseen such a problem.

The threat of the atom bomb is at least now recognized and we have already a growing body of knowledge which can be mastered while an emergency is still remote.

Have you made your reservations for the annual meetings of the

American Medical Association, Chicago, June 21-25

Indiana State Medical Association, Indianapolis, October 26-28

Medical Panorama by the Associate Editor

The WYOMING State Medical Society announces the incorporation of an insurance company which is sponsored by the state society in much the same way as the Doctor's Plan was in Indiana. All the announced features of the Wyoming insurance plan correspond to our own Mutual Medical policies except that the Wyoming doctors have agreed to accept the minimum fees paid by the company in full settlement for operations performed in families whose income is below a certain figure. If the subscriber's income is in excess of the designated level, the same minimum fee is paid, but the physician is permitted to make an additional charge.

It is announced that the company plans to broaden the coverage as experience and actuarial data indicate. This is also similar to the Doctor's Plan, which is now planning for increased coverage as a result of favorable business operations to date.

———SIMA———

The NEBRASKA State Medical Journal reports on a proposal designed to increase the number of medical graduates. During recent years the population of the United States has increased out of proportion to the production of physicians. Further increase of medical students is said to be impractical with the present setup since all the now existing schools are teaching at close to 100 per cent capacity. Larger classes would serve only to devaluate the standards of instruction. Also, the high cost of medical education may limit the number of students in the future.

Dr. Thomas Parran, former Surgeon General of the United States Public Health Service, recently proposed to the Association of American Medical Colleges that the Federal Government subsidize the training of physicians, with the stipulation that successful candidates obligate themselves to spend a month in federal service for each month of scholarship. Alternate methods of fulfilling the graduate's obligation to the government are suggested, such as service with state or county public health organizations or service in general practice in an area not adequately supplied with medical service.

The Nebraska Journal does not go into the merits of the case, but does point out that the medical profession should be acquainted with such developments, and should devote careful study to this and other innovations in the field of medical education, with a view to keeping medical education "free in spirit and progressive in quality."

The *BRITISH MEDICAL JOURNAL* comments on the recent New York State Supreme Court decision in regard to the legitimacy of a child born as a result of artificial insemination, and speculates on the legal weight which this decision will carry when the same question is to be decided by English courts in the future. In pointing out that the New York Court opinion covered only one of many legal questions by ruling such a child as legitimate, the British article calls attention to the fact that the courts will soon be called on to rule on property rights in such situations.

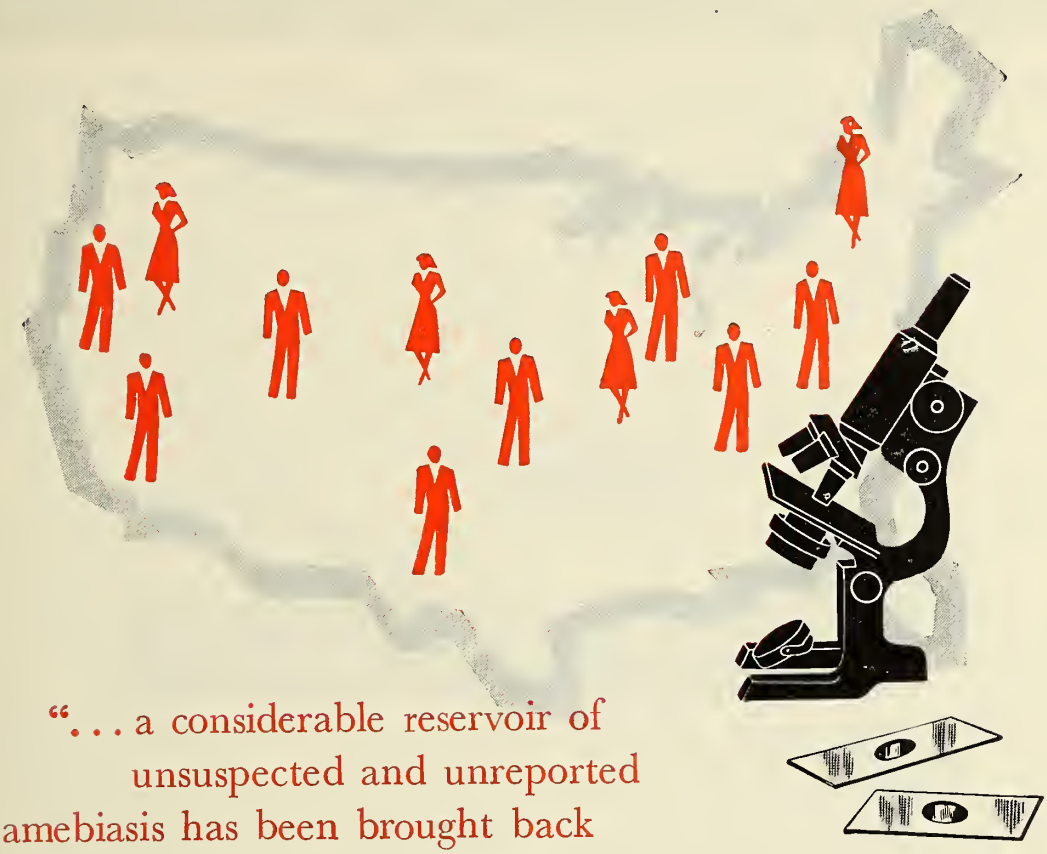
While no decisions have been rendered by English jurists in regard to artificial insemination, the journal states that there is much weighty opinion to the effect that such children would be considered as illegitimate in the eyes of British law. The fact that the New York State Justice directed his attention primarily to the best interests of the child is reported on with favor, and the article is concluded by stating that "his view was based on common sense, and is bound to carry weight in all future discussion of this difficult problem."

———SIMA———

The Medical Bulletin of the Sedgwick County Medical Society (WICHITA, KANSAS), in its treasurer's report, sets out its dues schedule, "as a matter of interest to new members." This county society has provided a sliding scale for its local dues. During the first year of practice its members are taxed approximately 55 per cent, and during the second year of practice, approximately 75 per cent of the regular dues. The regular amount is collected for the third year of practice and thereafter until the member reaches the age of 65. Between the ages of 65 and 75 the dues revert to the level of the first year of practice and after 75 no county society dues are collected. In each case the amount of state dues is collected in full.

———SIMA———

Dr. Frank L. Meleney of the Columbia University College of Physicians and Surgeons announced recently that bacitracin is now being produced in sufficient quantities for extensive clinical trials. Special investigations to determine the characteristics of this new antibiotic will be conducted in New Orleans, San Antonio, Rochester, Minnesota, Madison, Cincinnati, New York, Philadelphia, Baltimore and Charlottesville, Virginia. These cities were chosen to obtain a wide variation in climate, temperature, general physical condition of patients, and differences in economic level. The U. S. Food and Drug Administration is setting up tentative standards and specifications for potency and safety.



"... a considerable reservoir of unsuspected and unreported amebiasis has been brought back to the United States...."[1]

Urging clinicians and roentgenologists to be on the alert for signs of this disease, Wilbur and Camp[2] note the frequency with which the radiologist finds unsuspected lesions, ultimately diagnosed as amebiasis.

Diodoquin . . . high-iodine-containing amebacide . . . "is a valuable addition to the therapeutic remedies available for the treatment of this insidious and intractable disease."[3]

Diodoquin may be employed in acute or latent forms of amebiasis. Relatively nontoxic, well tolerated, Diodoquin does not produce unpleasant purgation and may be administered over prolonged periods.

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SEARLE

RESEARCH IN THE SERVICE OF MEDICINE

1. *Editorial: The Problem of Amebiasis, J.A.M.A.* 134:*1095 (July 26) 1947.*
2. *Wilbur, D. L., and Camp, J. D.: Amebic Disease of the Cecum: Clinical and Radiological Aspects, Gastroenterology 7:535 (Nov.) 1946.*
3. *Morton, T. C. St. C.: Diodoquin for Chronic Amoebic Dysentery in Service Personnel Invalided from India, Brit. M.J. 1:831 (June 16) 1945.*

Diodoquin is the registered trademark of G. D. Searle & Co., Chicago 80, Illinois.

What's Going On In Indiana by the Executive Secretary

General Practitioner Award. Upon suggestion of the president, the state association will present a medal to some outstanding general practitioner at the annual meeting in October. Each county medical society will be invited to submit a nomination to the Council. The Councilors will select three names and present them to the House of Delegates for balloting. The physician elected by the delegates will receive the medal in a ceremony at the annual dinner. Recognition of an Indiana general practitioner follows a project begun this year by the American Medical Association. The A.M.A. chose the "Family Doctor of 1948" at its interim session in Cleveland in January, and it turned out to be a very successful feature of the meeting. The "Hoosier Doctor of the Year" will be the Indiana State Medical Association's nomination for the A.M.A. General Practitioner Award.

—ISMA—

School Health Conference. School administrators, health educators and physicians will meet at the Claypool hotel in Indianapolis, Wednesday, October 6, 1948, for a series of panel discussions on how the medical profession can assist in the school health and physical education program. The conference, one of the first of its kind in the country, will be sponsored by the new Committee on School Health and Physical Education of our association. It is hoped that through this day-long meeting in October ways will be found for the medical profession and the school executives and health teachers to work more closely together. The attendance will be limited to 250, and after two discussion hours in the morning and two in the afternoon, the group will meet in a unity session for summation of ideas and conclusions. The office of State Superintendent of Public Instruction and the Indiana State Board of Health are cooperating with the committee in this project.

—ISMA—

Twenty-four-Hours-A-Day Service. Almost every week word reaches the state headquarters that some county medical society has set up machinery to provide around-the-clock medical service for its community. This is done through hospitals, telephone answering services, medical society offices, etc. Of all the criticisms directed at the medical profession, the difficulty of getting a doctor to make a house visit at night is the most prevalent. Whether we like it or not, the medical profession is definitely on trial at the bar of public opinion and, as a matter of public relations, physicians should, collectively and as individuals, do everything possible to minimize criticism. For county medical societies to establish mechanisms whereby satisfactory medical service is provided their respective communities will win public acclaim for medicine.

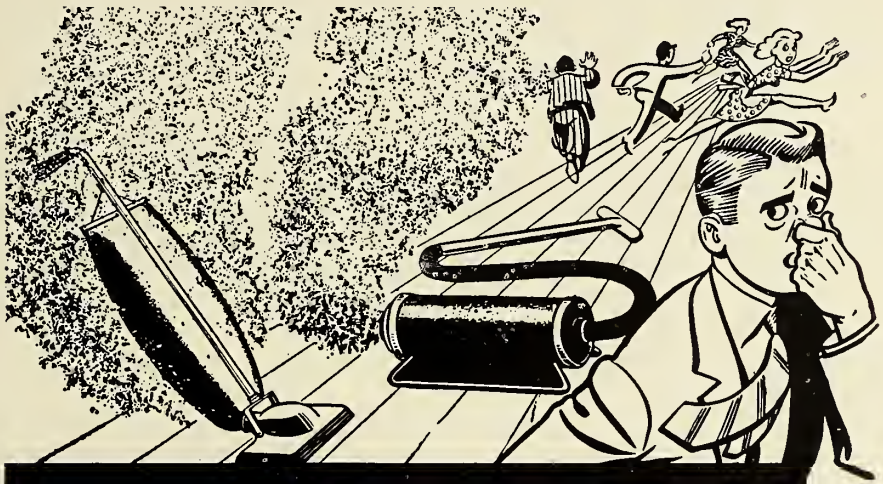
Compliment to Indiana. The State Medical Society of Wisconsin was so impressed with the lapel pins our association presents to physicians who have practiced medicine for fifty years that it asked permission to duplicate the design for its "Fifty Year Club" members. The Arizona State Medical Association is appropriating the design, too, but is converting it into bronze plaques instead of lapel pins. The Arizona association is also copying our "Certificate of Distinction." The Medical Association of the State of Alabama has done likewise. The Indiana State Medical Association is glad to have the other state organizations think so well of its work.

—ISMA—

Study of Nurse Training. Some very interesting facts about student nurse training may be uncovered as a result of a study being conducted jointly by the state medical, nurse and hospital associations. Questionnaires were sent to the twenty-seven accredited nurse teaching hospitals in March, asking (1) the time student nurses spend in classes, (2) the time nurses spend in practice as part of their training, and (3) actual time spent in work which actually is beneficial to the hospital. The information will be used by committees from the three associations in an attempt to determine what methods may be employed to increase the number of young women entering the field of nursing. J. B. H. Martin, administrator of the Indiana University Medical Center and chairman of the joint committee, prepared the questionnaires.

—ISMA—

Auxiliaries Award Nurse Scholarships. The Woman's Auxiliary units in the state (30 of them) do many helpful things and will do greater service as the auxiliary program is expanded. Take the nurse recruiting movement, for instance. The good ladies have not only talked to high school girls about the opportunities in nursing, but at least six of the auxiliary units are providing financial help to nursing school students through scholarships. In Vigo county scholarships of $60 for the first year and $50 for the two succeeding years are awarded one student at each of the two hospitals. The Lake county auxiliary gives a $75 scholarship at St. Catherine's hospital in East Chicago. A $200 scholarship is offered by the Fulton county unit and in Porter county an award of $25 is given annually to a high school graduate taking up nursing. The Howard and Madison county auxiliaries give scholarships to girls in training at their local hospitals. The Elkhart County unit provides $100 a year help for a nursing school student. What the doctors' wives do in getting *Hygeia* subscriptions, helping in community campaigns, assisting at medical meetings, etc., would fill a big book.



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News Notes

Following his recent discharge from the Army, Dr. Glenn W. Irwin, Jr., of Indianapolis, is now a medical resident at the Indiana University Medical Center. He served for two years at Schofield Station Hospital, in Honolulu. Doctor Irwin was a captain at the time of his separation from service.

Dr. Richard H. Schug has opened an office at 605 E. Maple Road, in Indianapolis, for the practice of general surgery. Following five years' service in the Army, Doctor Schug was on the staff of the Ford Hospital, in Detroit.

Dr. Wallace E. Bash, of Indianapolis, has moved to Fort Wayne, where he will open an office. He has just completed a residency in pediatrics at the Indiana University Medical Center.

Governor Gates has called to the attention of the Indiana State Medical Association the drive to raise money to purchase the "Shades," a beautiful tract of 1,452 acres of virgin forest southwest of Crawfordsville, for use as a state park. Thirty thousand dollars were still needed April 15 to reach the goal of $300,000.

Contributions, which may be deducted from federal income tax, should be sent to the "Save the Shades," 777 N. Meridian street, Indianapolis.

"I am confident that your generosity at this time will bring you a great deal of satisfaction and will help us acquire for the children of Indiana what is to become a great state park," said the Governor.

Dr. John W. Humphreys, of Darlington, has opened an office in Crawfordsville for the practice of medicine. Doctor Humphreys had practiced in Darlington for several years, both prior to and following service in the Army.

Recently discharged from the Army, at Percy Jones General Hospital, Dr. Robert J. Lehman, formerly of Berne, has accepted a residency at the Pilgrim State Hospital at Long Island, New York.

Miss Ruth V. Kirk, executive secretary of the State Board of Medical Registration and Examination, in April requested secretaries of county medical societies to send her a list of persons practicing medicine in their respective counties so the board could determine whether all had registered under the 1947 law. Miss Kirk asked THE JOURNAL to express her thanks and appreciation to the secretaries for their prompt response to her request.

Dr. J. R. S. Himebaugh, formerly in general practice at Morocco, Indiana, has located in Burlington, Iowa. His address is 707 Farmers & Merchants Bank Building.

Discharged as a major recently, following thirty months' service, Dr. Lewis E. Morrison, II, has opened an office at 503 Hume Mansur Building, in Indianapolis, specializing in Ear, Nose and Throat. Doctor Morrison served at Wakeman and Tilton General Hospitals.

The Board of Examiners of the **American College of Chest Physicians** announces that the next oral and written examinations for Fellowship will be held in Chicago, June 17, 1948. Candidates for Fellowship in the College, who would like to take the examinations, should contact the Executive Secretary, American College of Chest Physicians, 500 North Dearborn Street, Chicago 10, Illinois.

The fourteenth annual meeting of the American College of Chest Physicians will be held at the Congress Hotel, Chicago, Illinois, June 17-20, 1948. An interesting scientific program has been arranged for this meeting, and speakers from several other countries are scheduled to appear.

Catalogue of Professional Motion Picture Films. The Academy-International of Medicine has compiled a comprehensive catalogue of surgical, medical and dental films, alphabetized both as to classification and titles, which will enable you to locate, select and secure pertinent films. It is limited in extent only by the number of films on which information was provided and contains a number of foreign films. In a section devoted to Audio-Visual Services are announcements of new developments and other data which might interest those who are building programs. As a service to the profession the Academy is offering to mail, upon request, a complimentary catalogue to all A.M.A. officials, deans of medical schools, state secretaries, state program chairmen, authors of listed films and to certain foreign libraries. Copies will be provided to others, upon request, until the supply is exhausted. Requests should be addressed to:

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A comprehensive program is planned for the 104th annual meeting of the American Psychiatric Association, to be held in Washington, D. C., May 17-20. Atomic energy in medicine, psychiatry among the Chinese, brain surgery, glatamic acid in increasing intelligence, psychiatric aid in learning, and juvenile problems are among the subjects to be discussed. Speakers on the program will include: Leland B. Alford, M.D., of St. Louis; N. W. Winkelman, M.D., of Philadelphia; Karl M. Bowman, M.D., San Francisco; Father Noel Mailloux, of Montreal, Quebec; Rabbi Abraham Cronbach, of Cincinnati; John Z. Bowers, M.D., of Washington, D. C.; Colonel John M. Caldwell, of the office of the Surgeon General; Major General Paul R. Hawley; and Walter Freeman, M. D., Washington, D. C.

The Eleventh Indiana Councilor District Medical Association will meet at 2:30 p.m. Wednesday, May 19, in the Indiana Hotel at Wabash. The scientific program will be given by Dr. Russell A. Hippensteel of Indianapolis, assistant professor of pediatrics, Indiana University School of Medicine, and Dr. R. Arnold Griswold of Louisville, Kentucky, head of the Department of Surgery, University of Louisville School of Medicine, both of whom are natives of the district. Officers will be elected at a business session.

The wives of the physicians will be entertained at tea at the Wabash Country Club while the scientific program is in progress, and will join their husbands afterward for a tour of the Honeywell Memorial Building.

Dinner will be served in the hotel at 6 o'clock. Music will be provided by the "Four Jakes." Eiffel G. Plasterer of Huntington, will present the "Bubbles Concerto" as the entertainment feature of the evening.

The American Congress of Physical Medicine will hold its twenty-sixth annual scientific and clinical session September 7, 8, 9, 10 and 11, inclusive, at the Hotel Statler, Washington, D. C. Scientific and clinical sessions will be given the days of September 7, 8, 9, 10 and 11. All sessions will be open to members of the medical profession in good standing with the American Medical Association. In addition to the scientific sessions, the annual instruction courses will be held September 7, 8, 9 and 10. These courses will be offered in two groups. One set of ten lectures will be based primarily on physics and physiology and attendance will be limited to physicians. One set of ten lectures will be more general in character and will be open to physicians as well as to physical therapists. The physical therapists must be registered with the American Registry of Physical Therapy Technicians. Full information may be obtained by writing to the American Congress of Physical Medicine, 30 North Michigan Avenue, Chicago 2, Illinois.

VANDERBURGH COUNTY POSTGRADUATE PROGRAM

A splendid program on "Medical Economics" has been arranged by the Graduate Education Committee of the Vanderburgh County Medical Society for Thursday, May 27, 1949, at Evansville College, Evansville.

An invitation to attend has been extended to all physicians of the state. Doctors staying for dinner should notify Arthur Tiernan, Executive Secretary of the Vanderburgh County Medical Society, 3rd and Main Building, Evansville.

The program will be the fourth of a series sponsored by the Vanderburgh county society, and also will be the annual First District Medical Society meeting. Counties in the district are Vanderburgh, Posey, Warrick, Spencer, Perry, Pike and Gibson.

The Committee on Medical Education and Hospitals, of which Dr. Herman M. Baker of Evansville is chairman, is observing the postgraduate programs at Evansville. The committee may sponsor similar meetings in other parts of the state.

The May 27 program follows:

2:00 p.m. MR. LOUIS B. LEVI, General Agent, Guardian Life Insurance Company; Evansville, Indiana.
Subject: *"What the Physician Should Know About Personal Insurance."*

2:30 p.m. MR. ALBERT STUMP, Attorney, Indiana State Medical Association; Indianapolis, Indiana.
Subject: *"The Legal Responsibilities of Physicians."*

3:00 p.m. DR. L. FERNALD FOSTER, Secretary, Michigan State Medical Society; Bay City, Michigan.
Subject: *"Public Relations Begin in the Doctor's Office."*

3:30 p.m. DR. F. S. CROCKETT, Chairman, A.M.A. Council on Rural Medical Service; Lafayette, Indiana.
Subject: *"What the A.M.A. is doing about Rural Medicine."*

4:00 p.m. Intermission.

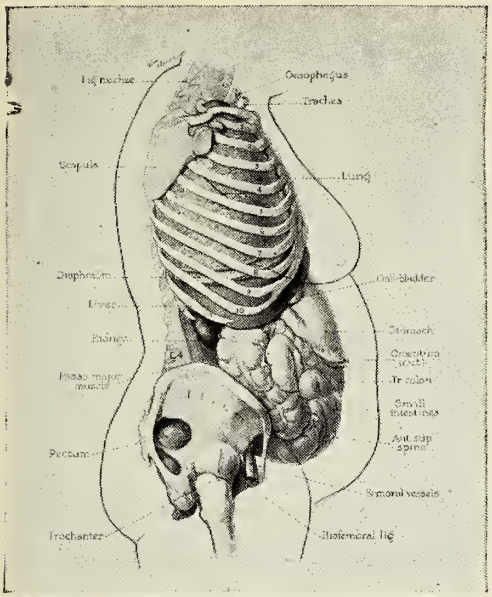
4:30 p.m. DR. CLEON A. NAFE, President, Indiana State Medical Association; Indianapolis, Indiana.
Subject: *"Musts for Medicine in Indiana."*

5:00 p.m. MR. THOMAS A. HENDRICKS, Secretary, Council on Medical Services, A.M.A.; Chicago, Illinois.
Subject: *"Insurance Plans."*

5:30 p.m. MR. J. W. HOLLOWAY, JR., Director, Bureau of Legal Medicine and Legislation, A.M.A.; Chicago, Illinois.
Subject: *"Federal Legislation Concerning Medicine."*

6:00 p.m. Dinner—College Campus.

8:00 p.m. DR. MALCOLM T. MacEACHERN, Associate director, American College of Surgeons; Chicago, Illinois.
Subject: *"Future Trends in the Hospital Field."*



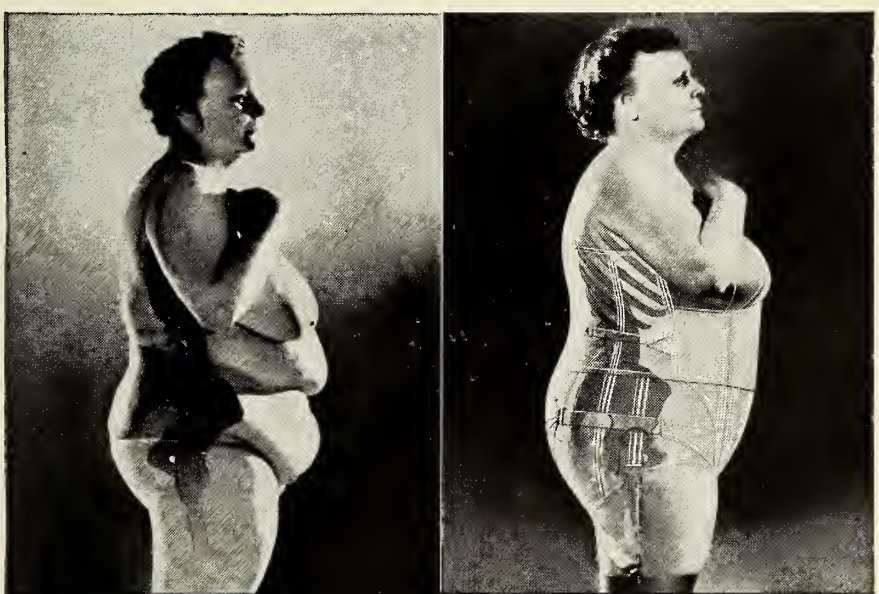
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The adjustment of the Camp Support lays a foundation about the major portion of the pelvic girdle. From this foundation, the upright sections of the support hold the load up and back and give excellent support to the lumbar and lower dorsal regions.

The holding of the load furnishes not only relief to the spine but also lessens the drag of the viscera upon the diaphragm.

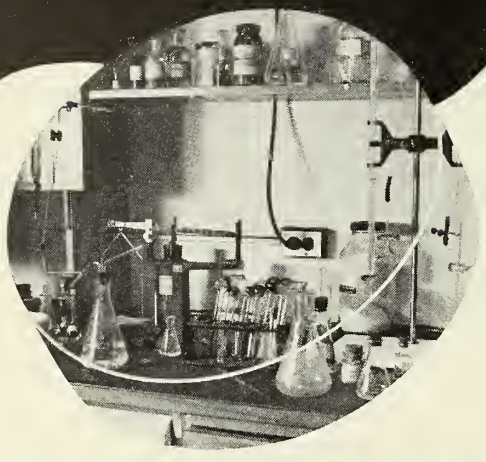


Photographs—Obese patient with 3rd degree pendulous abdomen and arthritis of the spine before and after application of abdominal and breast supports. (Skeletons indrown.)

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AMES COMPANY, INC.
ELKHART, INDIANA

All general practitioners are invited—and urged—to attend a meeting sponsored jointly by the **Indiana Board of General Practice of Medicine, Inc.**, and the **American Academy of General Practice** at Indianapolis on the afternoon and evening of May 19, 1948.

The meeting will open in the auditorium of the Indiana University School of Medicine at 1:30 p.m. Diseases of the gastro-enteric tract will be discussed by members of the medical school faculty.

Dinner will be served at the Athenaeum at 6:30 p.m. Dr. W. D. Gatch, former dean of the Indiana University School of Medicine and president-elect of the Indianapolis Medical Society, will speak.

The ninth annual convention of the Indiana Society of X-ray Technicians will be held in the Lincoln Hotel, in Indianapolis, May 8-9.

Dr. Cleon Schauwecker, formerly of Clay City, will be associated with Dr. V. Earle Wiseman at Greencastle, in the general practice of surgery. Doctor Schauwecker practiced medicine in Greencastle until approximately three years ago, when he began the study of general surgery at the Milwaukee County Hospital, in Milwaukee.

CALL FOR SCIENTIFIC EXHIBIT MATERIAL

Dr. J. L. Arbogast, Indianapolis, chairman of the Committee on Scientific Exhibit for the annual session in Indianapolis October 26, 27 and 28, 1948, has issued a call for scientific exhibit material. He points out that exhibit space in the Murat Temple is limited and urges would-be exhibitors to contact him early.

Each exhibitor will be awarded a certificate by the state medical association and this year, for the first time, gold, silver and bronze medals or plaques will be presented to the three best exhibits. Dr. Arbogast is director of Clinical Laboratories, Indiana University Medical Center, Indianapolis 7, and mail should be addressed to him there.

Announcement has been made of the association of Dr. Ray H. Burnikel, of Evansville, with the Wood Hospital and Clinic, in Oakland City. He is limiting his practice to proctology.

Dr. George D. Davis has been appointed associate radiologist at the Methodist Hospital, in Indianapolis. A graduate of Indiana University School of Medicine, and a former intern at Methodist Hospital, Doctor Davis is completing a two-year fellowship in radiology at Mayo Clinic.

Harley Williams, M. D., of London, England, secretary general of the British National Association for the Prevention of Tuberculosis, will be among the speakers at the annual meeting of the **Indiana Tuberculosis Association** in Hotel Lincoln, Indianapolis, May 11 and 12. He will speak at 2 o'clock on the afternoon of May 11 upon the subject, "Tuberculosis in the British Isles," and members of the medical profession are invited to hear him.

The night of May 11 the Indianapolis Medical Society will join in the meeting. F. J. Hill, M. D., Minneapolis commissioner of health, will speak on "Evaluation of the x-ray Survey," and Joseph D. Aronson, M. D., of the Henry Phipps Institute, Philadelphia, will be heard on the "Present Status of BCG."

Dr. Frank L. Jennings of Indianapolis is president of the Indiana Tuberculosis Association and Murray A. Auerbach is the executive secretary.

The 1948 spring meeting of the Eighth District Medical Society will be held at Anderson, on Wednesday, May 19, 1948, at which time the members of the district will be guests of the Delco-Remy Division of General Motors. The program includes a plant walk from two to four, a social hour at five oclock, and a dinner at 6:30 p.m. at the Anderson Country Club. The speaker of the evening will be Dr. James G. Townsend, chief of the Division of Industrial Hygiene of the United States Public Health Service, Washington, D. C.

INDIANA UNIVERSITY NEWS NOTES

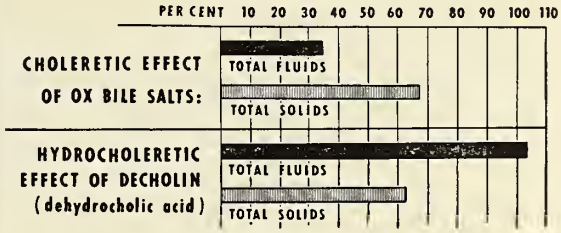
Selection of a record freshman class for the fall semester of the Indiana University School of Medicine by a 22-member faculty committee on admissions has been announced by Dr. John D. VanNuys, dean of the school.

One hundred and thirty-six members of the class, which will take the first year of medical training on the Bloomington campus and the last three years on the campus of the University's Medical Center in Indianapolis, are residents of Indiana. Only six students not residents of Indiana were accepted.

A total of 793 applications for admission to the School of Medicine were received and the final selection represented weeks of investigation into the qualifications and credentials of each applicant. In making the final selection members of the committee sought to include all Indiana applicants who could meet the university's requirements.

(Continued on Page 528)

DECHOLIN HYDROCHOLERESIS Encourages Biliary Tract Drainage



● **Percentage Increase in Composition and Quantity of Bile Flow**

Ivy, A. C., et al: Am. J. Dig. Dis. 7:333 (Aug.) 1940.

HYDROCHOLERESIS—

an increased production of thin liver bile—is a desirable approach to therapy of non-obstructive biliary tract disturbances.

DECHOLIN—

by producing an increased flow of bile—washes stagnant, infected bile from the intrahepatic and extrahepatic biliary passages, removing pus-laden material and discouraging the ascent of infection.

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ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

AMES COMPANY, INC.
ELKHART, INDIANA

(Continued from Page 527)

The class again this year is composed largely of students who saw active military service during World War II and are returning to school to complete their interrupted education.

Acceptance of 142 freshmen students for the 1948 fall term will maintain the Indiana University School of Medicine ranking as the fifth largest medical school, on the basis of enrollment, among the 70 accredited medical schools of the nation, although many of them have larger teaching staffs, bigger operating budgets and more adequate buildings for teaching and research.

The students accepted were announced as follows:

John Taylor Anderson, Indianapolis; Robert U. Anderson, South Bend; Robert George App, Fort Wayne; Robert Eugene Arendell, Elberfeld; Amos Arney, Freedom; George Otis Avery, Indianapolis; John Robert Baker, New Albany; Joseph George Barkey, North Judson; Thomas Loyd Barrett, Owensville; Robert Brown Beam, Indianapolis; Franklin Keith Beeler, Anderson; Walter Martin Behn, Jr., Gary; Miriam Ruth Beldon, Seymour; Horace DeWitt Bell, Indianapolis; John Edmund Birdsell, Jr., New Albany; Donald Seigle Blackwell, Bloomington; Kenneth Eugene Bobb, Seymour; Glen Erwin Bonecutter, Butler; Charles Allen Bonsett, Indianapolis; Mary Elizabeth Booth, Sharpsville; Herschel Bornstein, Gary; Carroll Lee Boyle, Poseyville; Robert Lyle Boze, Berne; Earl Robert Brown, Jr., Kokomo; Emma Jane Brownley, Princeton; Reginald Alexander Bruce, Indianapolis; Vincent Guglielmo Canganelli, Pittsboro; James Floyd Carlin, Indianapolis; James Clayton Carver, Hammond; Pauline Doris Chambers, Indianapolis; Ned Baker Chase, Jr., Gary; Robert Hal Crawford, South Bend; Jean Arthur Creek, Evansville; John Lawton Cullison, Muncie; Ruth Ann Davidson, Portland; Arthur Ernest Demeter, Whiting; William Erl DeMyer, South Bend; Morris William Dickey, New Castle; Robert Preston Dimmett, Evansville; Laurence James Dougall, South Bend.

William N. Ellis, Indianapolis; Wesley Bryan Elstun, Hammond; James Edward Farner, South Bend; Don Clifford Fields, Orleans; Albert Alan Fischer, Indianapolis; Paul Michael Flanagan, South Bend; Austin Leonard Gardner, Fort Wayne; Gustave Gavis, Indianapolis; Robert Paul Giordano, South Bend; Hector Hal Gonzales, Fort Wayne; Jerry Greenhut, Union Mills; Iona Helen Hamlett, Fort Wayne; Eldon Carl Hann, Indianapolis; Charles William Hannah, Crane; O. Fred Harless, La Grange; Ralph Ivon Hartsough, North Liberty; Gene Richard Hay, Michigan City; Herman Hepner, Bloomington; John Oliver Hildebrand, Jr., South Bend; Harry Robert Hitner, Evansville; Edward Lowell Hollenberg, North Manchester; Everett Leroy Holt, Indianapolis; John Richard Huddle, Attica; George Wehrs Irmscher, Fort Wayne; Clyde W. Jett, Terre Haute; Hubert Eugene Judy, North Manchester; John David Karns, North Manchester; Foster Claude Keller, South Bend; James Willard Kemper, Indianapolis; Warren Lee Kilmer, Elkhart; Ted C. Kirby, Mooreland; Eugene Carl Klatte, Indianapolis; Homer Frederick Kline, Andrews; William Roy Kopp, Anderson; Robert Benjamin Krueger, Anderson; Donald Ray LaFollette, New Salisbury; James Walter Ledwith, Indianapolis; Leonard Daniel Lewis, South Bend; Edwin Lee Libbert, Jr., Indianapolis; Robert Alan McDougal, Terre Haute; Frank McGue, Gary; Richard Charles McNabb, Carthage.

Stephen Rollins Markey, Fort Wayne; Naiad Ada Mason, North Liberty; Charles Gustave Matheus, Connersville; Stanley Meyer Mendelson, Columbus, Ohio; Joseph Franklin Milan, Indianapolis; Victor Calvin Moeller, Fort Wayne; Richard Ben Moore, Indianapolis; William Robert Moore, French Lick; Teddy Clay Moseley, Bloomington; James Benjamin Mullen, Richmond; Thomas Howard Nichols, Knox; Marvin Green Norris, Rushville; Harold Ralph Onyett, Oakland City; Calvin Eugene Oyer, Fort Wayne; Walter E. Parmley, Jr., South Bend; Ronald Alan Peake, Indianapolis; William Trotter Paynter, Salem; Emmett Coin Pierce, Jr., Indianapolis; Robert Neil Poole, Bedford; Robert Alexander Porter, Westport; Philip Elden Prather, Indianapolis; Ronald Warren Randhan, Gary; Joseph Rapaport, Indianapolis; Robert Frederick Reed, Rochester; Albert Irving Reiser, Miami Beach, Florida; Robert Keith Rhamy, Wabash; Donald Glenn Ritter, Elkhart; Robert William Roach, Terre Haute; William Howard Robinson, Madison; Milton Warren Roggenkamp, Palmyra; William Frederick Ruoff, New Albany; Roland Barneclo Rust, Jr., Indianapolis; Charles Earl Rutherford, Gas City.

Thomas Gustav Samter, Cairo, Egypt; Jacqueline Rita Schaefer, Indianapolis; Richard John Schilling, Lafayette; Leon Harry Schmidt, Indianapolis; Marshall Holmes Seat, Washington; Stanley Francis Seipel, Corydon; Burton Jack Shapiro, Terre Haute; Charles Earl Sheets, Anderson; J. Wesley Snider, Indianapolis; John Ford Standard, Jr., Elkton, Kentucky; Jesse Clarence Staten, Greencastle; John A. Stroube, Portland; William Edward Symon, Fort Wayne; Harold Frederick Taylor, Indianapolis; John Daniel Tharp, Trafalgar, Indiana; Martin Alfred Thomas, Terre Haute; Paul Margrave Thompson, Bloomington; Walter Benton Tinsley, Jr., Indianapolis; Harold K. Tsuji, Honolulu, Hawaii; Marvin Dale Utley, Mt. Vernon; Louis Augustine Walker, Cannelsburg; David E. Wheeler, Indianapolis; Donald Clinton Whitney, Indianapolis; Rachel Ann Winslow, Bloomington; Donald Howard Yurdin, New York, N. Y.; Frank Henry Zahrt, LaPorte; Wendell Irvin Zaring, Jr., Vallonia.



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Deaths

Alois B. Graham, M.D., retired surgeon of Indianapolis, died on April fifth in Pittsburgh, Pennsylvania, where he had been living since his retirement. He was seventy-seven years of age. A graduate of the Medical College of Indiana, in Indianapolis, in 1894, he had taken postgraduate work at the Universities of Bonn and Berlin, Germany, and at Edinburgh, Scotland, and London England. He was professor of surgery at Indiana University School of Medicine for approximately thirty years. He was president of the Seventh District Medical Society in 1913, the Indianapolis Medical Society in 1916, and the American Protologic Society in 1919. He served as president of the Indiana State Medical Association in 1931. A veteran of World War I, Doctor Graham served for eighteen months in the Medical Corps, and was chief of the surgical staff of Base Hospital 32 in France. He was an honorary member of the Indianapolis Medical Society and the Indiana State Medical Association, and was a Fellow of the American Medical Association.



Dr. A. B. Graham

* * *

John F. Loomis, M.D., retired physician of Marion, died on March third in St. Petersburg, Florida, at the age of eighty-four. A graduate of the Cincinnati College of Medicine and Surgery, in 1890, Doctor Loomis practiced in Kentucky for several years, before establishing a practice in Marion in 1900, where he had practiced until his retirement several years ago. Doctor Loomis was an honorary member of the Grant County Medical Society and the Indiana State Medical Association, and was a member of the American Medical Association.

* * *

Carl M. Clark, M.D., of Oakland City, died on April fourth, at the age of forty-eight. A graduate of Indiana University School of Medicine, in 1927, Doctor Clark had practiced in Oakland City since that time. He was a member of the Gibson County Medical Society and the Indiana State Medical Association, and was a Fellow of the American Medical Association.

Joseph S. Chandler, Jr., M.D., of Muncie, died on April third, at the age of twenty-four. He was a graduate of the University of Louisville School of Medicine, and was an intern at Ball Memorial Hospital, in Muncie.

* * *

Arleigh E. Allenbaugh, M.D., of Evansville, died on April third, following an illness of approximately five years. He was fifty-two years of age. He was a graduate of Indiana University School of Medicine, in 1920, and had specialized in surgery. Doctor Allenbaugh was a member of the Vanderburgh County Medical Society and the Indiana State Medical Association, and a Fellow of the American Medical Association.

* * *

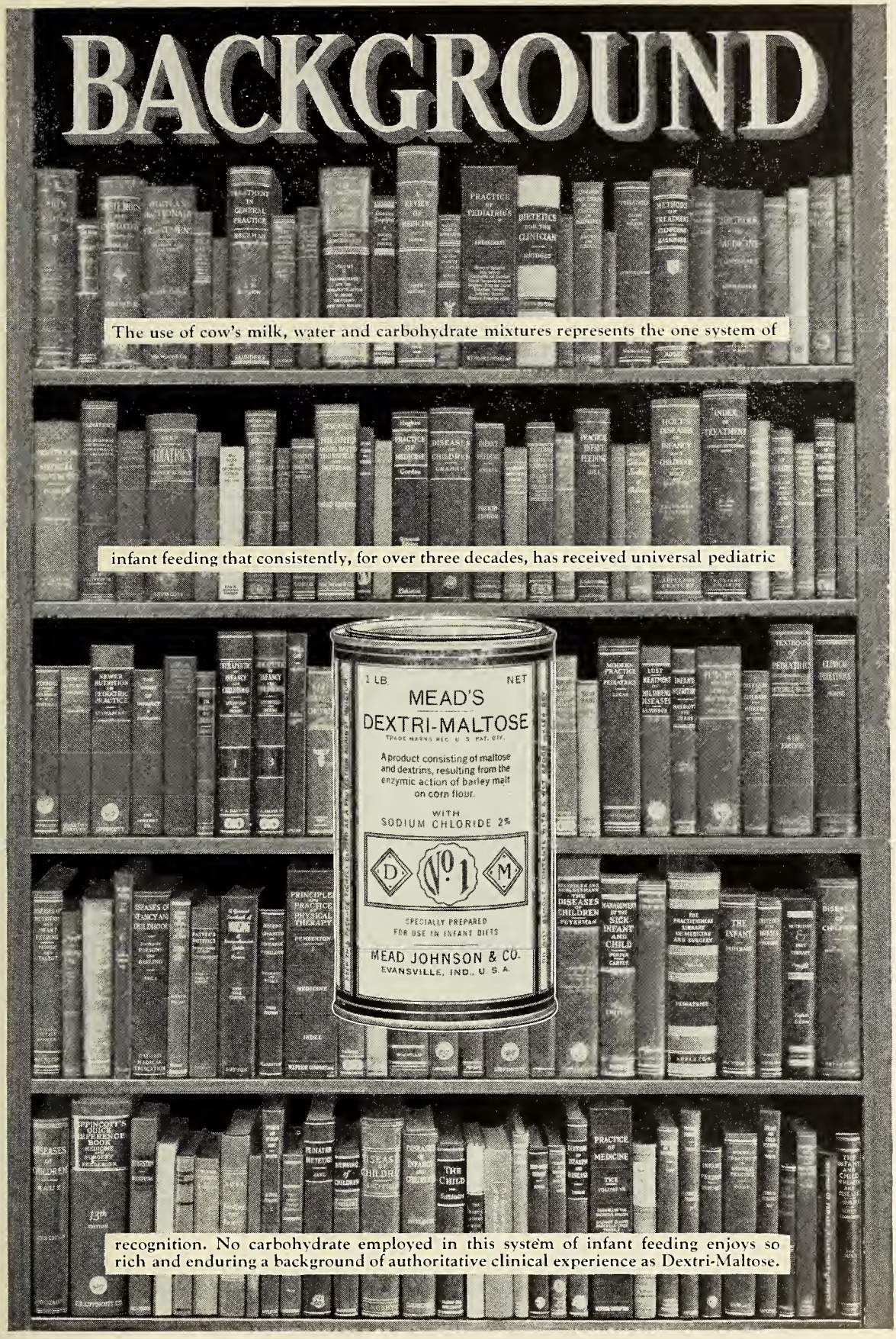
Clarkson B. Thomas, M.D., of Plainfield, died suddenly on March thirteenth, on the eve of his seventy-first birthday. He had practiced in Plainfield for forty-five years, and had retired from active practice in 1947. A graduate of the Physio-Medical College of Indiana, in Indianapolis, in 1902, Doctor Thomas was a member of the Hendricks County Medical Society and the Indiana State Medical Association, and was a Fellow of the American Medical Association.

* * *

Curtis M. Wray, M.D., died suddenly on March nineteenth at his home in LaFayette. He was seventy-one years of age. Doctor Wray graduated from the Indiana Medical College, School of Medicine of Purdue University, in Indianapolis, in 1906, and had practiced in Monitor and New Richmond, before establishing a practice in LaFayette in 1923, where he had continued to practice until his death. During World War I he had served as a lieutenant in the Medical Corps, at Fort Riley, Kansas. He was a member of the Tippecanoe County Medical Society, the Indiana State Medical Association, and the American Medical Association.

* * *

William Walkinshaw, M.D., died after a long illness at his home in Stillwell. He was eighty-one years of age. He was a graduate of Queen's University Faculty of Medicine, in Kingston, Ontario, in 1893. Doctor Walkinshaw was an honorary member of the LaPorte County Medical Society and the Indiana State Medical Association, and a member of the American Medical Association.


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DEATHS OF INDIANA PHYSICIANS IN 1947

(Compiled by James B. Maple, M.D., Chairman, Committee on Necrology)

(M) Member I.S.M.A.; (H) Honorary Member; (R) Retired

Name	Age	Date of Death	Address	Cause of Death on Death Certificate
Lambert, Junius L. (M)	86	Jan. 2	Brazil	Cerebral thrombosis.
White, Charles M. (M)	93	Jan. 2	Clinton	Senility.
Bass, Frank E. (M)	65	Jan. 4	Shelbyville	Carcinoma.
Ticen, W. E.	72	Jan. 4	Mooreland	Coronary thrombosis.
Hervey, Samuel W. (H)	81	Jan. 8	Fortville	Abdominal carcinomatosis.
Owsley, Guy M. (M)	64	Jan. 18	Thorntown	Carcinoma.
Schoen, Philip H. (H)	76	Jan. 20	New Albany	Arteriosclerotic heart disease.
Rogers, Sherman T. (H)	81	Feb. 6	New Albany	Pulmonary tuberculosis.
Goble, Daniel S.	77	Feb. 6	Indianapolis	Bronchogenic carcinoma.
White, Herbert Q.	76	Feb. 7	Grand View	Heart disease.
Deputy, Ernest M. (M)	69	Feb. 10	Dugger	Nephritis.
Shaul, Monroe	93	Feb. 15	Boonville	Senility.
Burns, Elizabeth V. B. (H)	78	Feb. 23	Ft. Wayne	Arteriosclerosis.
Boram, Harry B.	77	Mar. 1	South Bend	Arteriosclerosis.
Hamilton, Alexander (M)	72	Mar. 2	Frankfort	Cerebral embolus.
Roland, Wm. C.	78	Mar. 2	Indianapolis	Cerebral thrombosis; arteriosclerosis.
House, James W. (M)	68	Mar. 3	Bruceville	Nephritis.
Hanes, Clarence E.	73	Mar. 4	Indianapolis	Cirrhosis of the liver.
Horton, Joseph W.	77	Mar. 10	Monrovia	Coronary occlusion.
MacBeth, Albert H. (H)	84	Mar. 10	Ft. Wayne	Myocardial insufficiency; cerebral hemorrhage; arteriosclerosis.
Lomax, William	92	Mar. 12	Evansville	Coronary occlusion; chronic nephritis.
Wood, George W. (M)	67	Mar. 16	Indianapolis	Coronary occlusion.
Hull, King L. (M)	49	Mar. 16	Bloomfield	Coronary thrombosis.
Gramling, Joseph J. (M)	68	Mar. 18	Indianapolis	Coronary occlusion.
McGaughey, Walter M. (M)	76	Mar. 24	Greencastle	Coronary disease.
Armistead, Henry W.	79	Mar. 25	Indianapolis	Hypostatic pneumonia; generalized arteriosclerosis.
Tallman, Homer H. (M)	64	Mar. 29	Culver	Hypostatic pneumonia.
Kercheval, Clarence F. (M)	74	Apr. 2	Clinton	Chronic emphysema.
Habermel, John F. (M)	46	Apr. 4	New Albany	Acute bacterial endocarditis.
Burr, John Rollo	73	Apr. 4	South Bend	Cerebral hemorrhage; sarcoma rectum.
Kearby, Delbert O. (M)	69	Apr. 10	Indianapolis	Rupture of abdominal aorta.
McCay, Ora Lee (M)	67	Apr. 17	Romney	Hypostatic pneumonia; chronic myocarditis; chronic nephritis.
Everman, Ord	71	Apr. 21	Indianapolis	Coronary occlusion.
Murphy, Charles F.	74	Apr. 23	Cynthiana	Cerebral hemorrhage.
Norton, William J. (H)	82	Apr. 25	Columbus	Myocardial degeneration.
Ruston, Abigail A. S.	77	Apr. 28	Evansville	Hypertensive heart; hypostatic pneumonia.
Fyfe, Malcolm B. (M)	71	May 10	Valparaiso	Rupture of abdominal aneurysm.
Wilson, James L. (M)	62	May 11	South Bend	Coronary occlusion; myocardial infarction.
Gibbs, Earl R. (M)	66	May 13	Wilkinson	Carcinoma of the breast; lung metastasis.
Lukemeyer, Edward G. (H)	87	May 26	Huntingburg	Angina pectoris.
Kaszer, Jacob	91	May 28	Plymouth	Senility.
McKinney, Sherman L. (M)	59	May 29	Huntingburg	Cardiac failure.
Boner, George W. (M)	69	May 30	North Madison	Coronary occlusion.
Pell, Harry M. (M)	57	May 31	Brazil	Cardiovascular renal disease.
Wadsworth, Heilman C. (M)	68	June 6	Washington	Cerebral hemorrhage; chronic myocarditis.
Gabe, Harry E. (H)	79	June 14	Indianapolis	Aneurysm.
Danruther, Charles B.	55	June 16	LaPorte	Diabetes Mellitus; coronary heart disease.
King, Abraham J. (R)	84	June 17	Indianapolis	Cerebral hemorrhage; chronic myocarditis.
Morris, George B. (M)	67	June 17	Bluffton	Coronary occlusion.
Trout, Robert E. (R)	91	June 19	Oaktown	Myocarditis.
Haymond, Raymond B. (R)	69	June 20	Waldron	Suicide, revolver shot.
MacGregor, Donald E. (M)	55	June 20	Indianapolis	Carcinoma esophagus; metastasis liver and lungs.
Derbyshire, John E. (M)	73	June 21	Van Buren	Arteriosclerosis.
LaBonte, Napoleon (M)	64	June 26	Monrovia	Coronary occlusion; chronic duodenal ulcer.
Jackson, John M. (M)	66	June 30	Aurora	Cerebral thrombosis.
Wickens, Mary (M)	73	July 2	Richmond	Toxic myocarditis; bowel obstruction.
Carney, Calvin E. (H)	79	July 3	Delphi	Coronary thrombosis.
Cline, George W. (M)	33	July 6	Union City	Cerebral hemorrhage.
Knapp, Adam J. (R) (M)	93	July 9	Evansville	Cerebral hemorrhage.
Newcomer, Grant V.	80	July 9	Elwood	Cerebral hemorrhage.
Mansfield, Thomas J. (M)	87	July 22	Muncie	Carcinoma.
Dunlap, Harold F. (M)	51	July 22	Indianapolis	Cerebral hemorrhage; cardiovascular disease.
Cottingham, Charles E. (H)	79	July 23	Indianapolis	Coronary thrombosis.
Camp, Waldo G.	54	Aug. 5	Lynnville	Auto accident.

(Continued on Page 534)



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Merle L. Youngs PRESIDENT

(Continued from Page 532)

Name	Age	Date of Death	Address	Cause of Death on Death Certificate
Willis, Joseph H. (H)	76	Aug. 6	Evansville	Heart disease.
Solt, William J. (R)	77	Aug. 16	San Pierre	Cachexia following fracture of the hip.
Engle, Walter C. (M)	67	Aug. 16	Indianapolis	Hypostatic pneumonia; general paralysis of insane.
Heald, Walter W. (M)	63	Aug. 18	West Lebanon	Coronary occlusion.
Cortner, Sidney G.	68	Sept. 3	Marysville	Coronary thrombosis.
Walterhouse, Harrison K. (M)	68	Sept. 7	Ladoga	Auto wreck.
Nutter, Lawrence W.	64	Sept. 13	Indianapolis	Cerebral hemorrhage.
McKean, Thomas J. (M)	74	Sept. 15	Montpelier	Cerebral embolism.
Stone, Oliver M.	80	Sept. 19	Oakland City	Endocarditis.
Wilson, Joseph P. (H)	82	Sept. 23	Scottsburg	Coronary thrombosis.
Flinn-Jordan, Minnetta C. (M)	78	Sept. 25	Wabash	Accident; fall; fractured hip.
Doolittle, Isaac H.	85	Sept. 28	South Bend	Subdural hemorrhage.
Boulware, Judson P. (M)	57	Oct. 1	Bloomington	Hypostatic pneumonia; cirrhosis liver.
Clawson, Joseph C. (M)	71	Oct. 7	Richmond	Carcinoma.
Smith, Leo M.	27	Oct. 9	Plymouth	Pneumonia.
Chenoweth, Albert C. (M)	70	Oct. 6	Huntington	Cerebral hemorrhage.
Whitaker, Joel (M)	70	Oct. 13	Indianapolis	Cardiac failure; pulmonary edema.
Colglazier, Donald L. (M)	48	Oct. 16	Indianapolis	Carcinoma.
Wilson, John R. (M)	78	Oct. 27	Terre Haute	Bulbar paralysis; cerebral sclerosis.
Kennington, Dillon J. (M)	35	Nov. 2	Michigan City	Heart disease.
Schriefer, Ernest E. (M)	67	Nov. 3	Cannelton	Cerebral hemorrhage.
Cooper, Ross A. (M)	65	Nov. 8	Carmel	Cerebral hemorrhage.
Clauser, Albert C. (M)	66	Nov. 12	Delphi	Cardiac thrombosis.
Bruner, Charles H. (M)	60	Nov. 16	Greenfield	Myocardial failure.
Crane, Albert L. (M)	54	Nov. 17	Evansville	Congested viscera.
Little, Edward O. (M)	69	Nov. 17	Danville	Adenocarcinoma of the gall bladder.
Ish, Ethan A. (M)	70	Nov. 19	Waterloo	Cardiac decompensation; hypertension.
Copeland, Charles C. (H)	83	Nov. 20	North Madison	Arteriosclerosis; coronary involvement.
Small, Emery F. (M)	73	Nov. 21	Vincennes	Angina pectoris.
Mount, William C. (M)	68	Nov. 24	Kirklin	Coronary occlusion.
Lake, George N. (M)	71	Nov. 24	Pleasant Lake	Coronary occlusion; coronary heart disease.
Frick, Herman C.	68	Dec. 4	Evansville	Coronary thrombosis.
King, Jack A. C. (M)	41	Dec. 5	Vevay	Cirrhosis of the liver.
French Virgil W. (M)	56	Dec. 9	Terre Haute	Paralysis agitans; chronic encephalitis; chronic myocarditis.
Alexander, Wm. P. (H)	90	Dec. 17	Gary	Coronary occlusion.
Mitchell, Harry F. (H)	81	Dec. 21	South Bend	Carcinoma of prostate.
Gibson, Cecil H.	59	Dec. 22	South Bend	Cerebral hemorrhage.
Beard, Paul H. (M)	45	Dec. 22	Indianapolis	Insulin shock.
Walters, Lindsay O. (M)	74	Dec. 27	Muncie	Coronary thrombosis.
McPherson, Solomon L. (H)	88	Dec. 31	Worthington	Mesenteric thrombosis; arteriosclerosis.

RECOMMEND LARGER PENICILLIN DOSAGE TO PREVENT INFECTION

To prevent infections of the throat, nose and tonsils and consequent recurrences of rheumatic fever, larger oral doses of penicillin should be given than have usually been recommended for rheumatic fever patients, say three writers in the February 21 issue of *The Journal of the American Medical Association.*

The writers are Albert Milzer, Ph.D., Kate H. Kohn, M.D., and Helen MacLean, A.B., Chicago, from the Department of Bacteriology and Cardiovascular Research, Medical Research Institute of the Michael Reese Hospital.

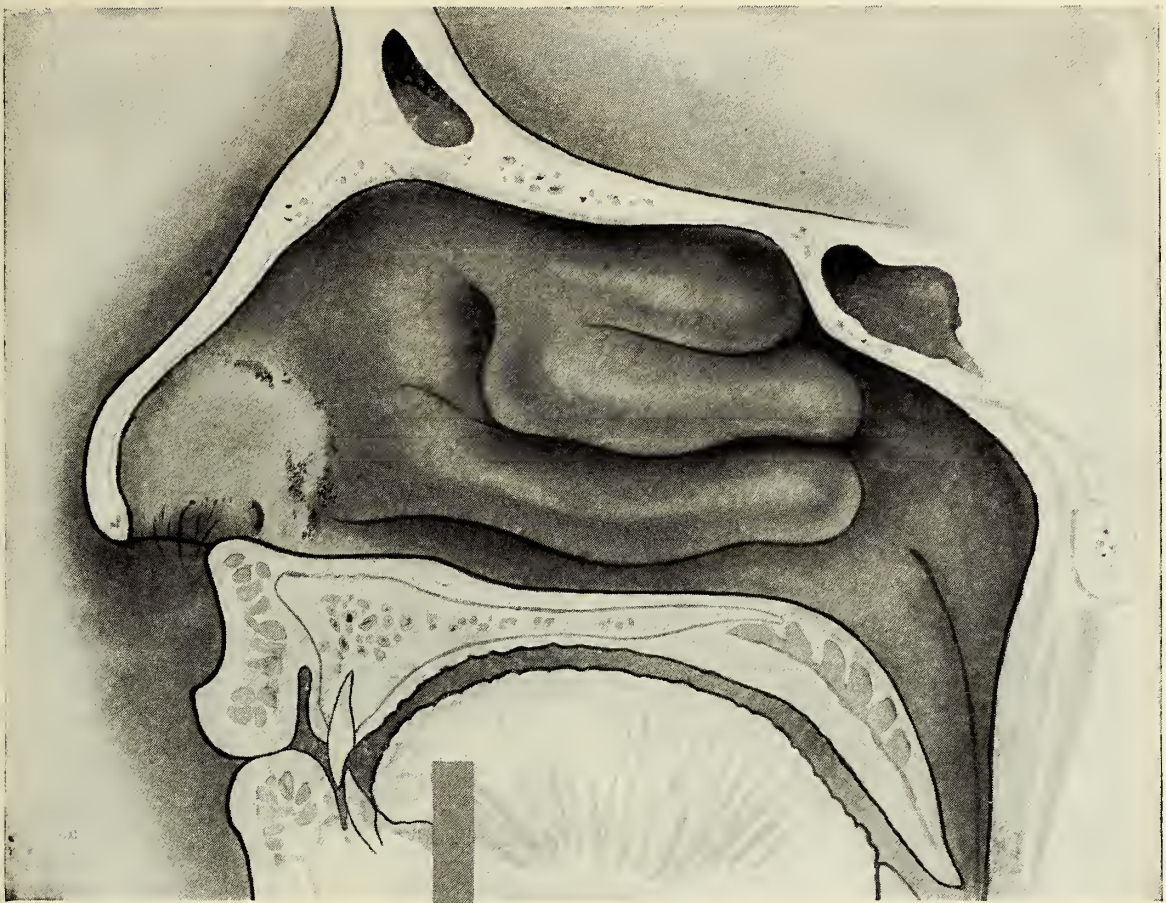
The penicillin is given for prevention or treatment of hemolytic streptococcus infections, which start in the upper respiratory tract and destroy red blood cells so that the patient rapidly becomes anemic. Such infections play a part in the development or recurrence of rheumatic fever.

The study reported by the writers involved 114 children with rheumatic fever, all attending the same special school for children with rheumatic heart disease. Over a period of at least five months, 64 of these children received an oral dose of 50,000 units of penicillin twice daily. The remaining 50 children received no penicillin but were in constant daily contact with the others. After the test group had received penicillin daily for at least four months, throat cultures were made from all 114 children.

Strains of beta hemolytic streptococci isolated in the throat cultures of 87 per cent of the group receiving penicillin were found to have become at least 16 times more resistant to penicillin than is true in routine tests of sensitivity to the drug prior to treatment.

Forty per cent of beta hemolytic streptococci from the group which did not receive pencillin were also significantly resistant to the drug. The writers explain this by the frequent opportunity for cross infection between the two groups, since they were in constant contact for at least four months before the throat cultures were made.

"Because our results show the development of significant resistance of beta hemolytic streptococci to penicillin, additional experiments are being planned in which larger oral doses of penicillin will be given daily for prophylaxis against recurrence of rheumatic fever," the writers state.



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Society Reports

INDIANA STATE MEDICAL ASSOCIATION

THE COUNCIL

April 4, 1948

The Council of the Indiana State Medical Association convened for its spring meeting at 10:20 a.m., Sunday, April 4, 1948, in the Columbia Club, Indianapolis, with Dr. Alfred Ellison, chairman, presiding. Roll call showed the following present:

Councilors:

First District—Herman T. Combs, Evansville
Second District—Not represented
Third District—William H. Garner, New Albany
Fourth District—Not represented
Fifth District—A. M. Mitchell, Terre Haute
Sixth District—Not represented
Seventh District—Cyrus J. Clark, Indianapolis
Eighth District—E. H. Clauser, Muncie
Ninth District—Wemple Dodds, Crawfordsville
Tenth District—William H. Howard, Hammond
Eleventh District—Not represented
Twelfth District—Paul A. Garber, South Whitley
Thirteenth District—Alfred Ellison, South Bend

Officers:

Cleon A. Nafe, Indianapolis, president.
Augustus P. Hauss, New Albany, president-elect.
A. F. Weyerbacher, Indianapolis, treasurer.
Frank B. Ramsey, Indianapolis, associate editor of THE JOURNAL.
C. H. McCaskey, Indianapolis, chairman, Executive Committee.
Albert Stump, Indianapolis, attorney.
Ray E. Smith, Indianapolis, executive secretary.

Guests:

Louis W. Spolyar, Indianapolis, director, Division of Industrial Hygiene, Indiana State Board of Health.
Norman M. Beatty, Indianapolis } co-chairmen, Legislative Committee.
J. William Wright, Indianapolis }
Charles F. Thompson, Indianapolis, chairman, Committee on Veterans Affairs and Rehabilitation.
J. Neill Garber, Indianapolis, chairman, Committee on Public Relations.
Dan Urschel, Mentone, member, Committee on Medical and Nursing School Scholarships.

The minutes of the midwinter meeting of the Council, held at Indianapolis on January 18, 1948, were approved as printed in the March, 1948, issue of THE JOURNAL.

Reports of Councilors

Brief reports by each of the councilors indicated that all districts are in good condition. District meetings are scheduled as follows:

1st District—Evansvile, May 27
2nd District—Bloomington, May 20
3rd District—French Lick, May 26
4th District—Batesvile, May 19
5th District—Greencastle, June 2
6th District—Shelbyville, May 12
7th District—Indianapolis, May 4
8th District—Anderson, May 19
9th District—Frankfort, May 13
10th District—Hammond, May 5
11th District—Wabash, May 19
12th District—Fort Wayne, April 6
13th District—South Bend, November 10

Reports of Officers

DR. NAFE, president, asked that the Council take action on two matters:

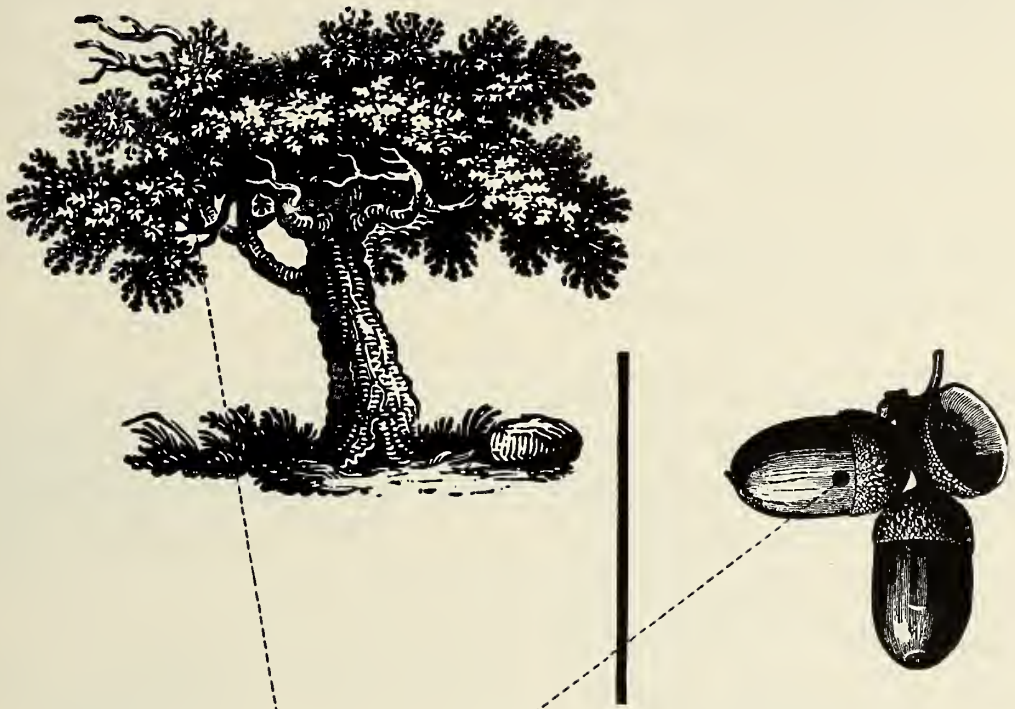
(1) The formulation of a method whereby the outstanding general practitioner of Indiana can be chosen for an award to be given annually, in line with the recommendation approved by the House of Delegates at the French Lick meeting in 1947, and following the lead taken by the American Medical Association at its January, 1948, meeting. "I would suggest that such an award be made this fall to an outstanding general practitioner. It would be my idea that the Council should select three names from those presented by the county medical societies, to be submitted to the House of Delegates for vote. This list should not include the names of any councilors, past presidents, or officers of the Indiana State Medical Association."

(2) The employment of a field secretary, as approved by the Council at its midwinter meeting on January 18, 1948. "The Council specified that this person should be a physician. After some investigation there is not much unanimity of opinion that he should be a physician. The Council therefore should take action to clarify this point and to set in motion machinery for securing this individual."

DR. HAUSS, president-elect, emphasized the need for another man in the headquarters office in view of the attacks made on the medical profession, and also in view of the fact that 1949 will be the centennial year of the state medical association. "If we take advantage of the opportunity that is given by our centennial to sell the medical profession to the public, it is going to take the full time of one man to plan that one event."

DR. WEYERBACHER, treasurer, called attention to the financial statements prepared by the George S. Olive and Company, certified public accountants, and published in the March, 1948, JOURNAL. He reported that $5,000 had been invested in United States Savings Bonds, Series G, since the first of the year. He also called attention to the fact that no provision has been made for additional funds to take care of the proposed field secretary.

DR. RAMSEY, associate editor of THE JOURNAL: First, I would like to thank the Council for the honor which goes with this job. However, I am finding that it is more work than honor. Since I have been in the job we have talked over several



Not all little acorns into great oaks grow.

Nor do all little children reach optimal height.

Nutritional elements absolutely essential to optimal growth and function are today available in convenient economical forms. Vitamins D and A—alone or combined with other growth and health promoting vitamins—are provided in potencies suited to supplementation, maintenance, and prophylaxis through infancy, childhood, adolescence, and adulthood, for as long as growth and life persist.

Upjohn
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fine pharmaceuticals since 1886

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times the cost of THE JOURNAL, trying to keep it down. We have reduced the size a little to keep the number of pages down, and have rearranged it so that colored printing is done in a more economical manner. Recently the question of using another type of paper was investigated. The supply of what we have been using is pretty well assured and should we change to another type it might not be available. We are therefore recommending that the use of the present type of paper be continued.

"Medicine of the Year." A letter received from John B. Youmans, M.D., Chicago, which reads in part as follows, was brought to the attention of the Council:

> "I am writing to you regarding a plan for providing an annual review of medical progress, to be issued as a supplement to state medical journals.
>
> "The proposal is this: A group of physicians and medical educators, for whom I am acting, will provide an authoritative annual review of the progress in medicine during the preceding year. This review is to be offered to members of the state medical societies as a supplement to their state medical journal, to be issued with the January number. The review, which has been tentatively named, 'Medicine of the Year,' will cover the entire field of medicine, including the specialties.
>
> "This service will be available through the respective state journals only to members of the various state medical associations, except that those who are not doctors of medicine, and hence are ineligible to become members of state societies, can obtain it directly. It may be announced and offered through county societies, by letters to members and in similar ways.
>
> "Our object will be to keep the subscription price for this service as low as possible. We will make every effort to meet our objective, and we know that the rate will be kept within a maximum limit of $2.00."

On motion of Drs. Mitchell and Clauser, the Council approved acceptance of this proposal for the Indiana State Medical Association.

Unfinished Business

1. *Mutual Medical Insurance, Inc.* ALBERT STUMP, attorney for Mutual Medical Insurance, Inc.: A new policy is being prepared which has these advantages over the old: Instead of having about seventy-five items listed in the policy itself as being the services for which indemnities will be paid, there will be a schedule of indemnities not attached to the policy but on file with the insurance department and with each physician in the state, and with the leaders of groups where there are non-employee groups, and also in union groups. These schedules will contain about 900 items of surgery. The new policy or certificate of membership will take out the provision that the member can receive indemnity only when in the hospital, and provide for indemnity no matter where the service is rendered.

The new certificate will also cover surgical services not listed in this schedule on a basis consistent with the items listed in the group, the exact amount of those items to be fixed by the executive committee. With that kind of a schedule we feel we will have no difficulty in meeting the competition of other companies that are now in this field. We believe that the larger groups that are now enrolling will come in in larger numbers.

Our income is greatly exceeding our expenditures. With the new policy, the income, we believe, will increase.

One misfortune that should be corrected is the fact that the American Medical Association has taken the employees of its office from the Blue Cross, according to reports we have heard. Whatever injures the Blue Cross injures Mutual Medical Service. Where the two companies have attempted to go separately, they have had difficulties.

Dr. Weyerbacher said the A.M.A. action was largely due to a misunderstanding, and the matter is not entirely closed.

Dr. Dodds mentioned the fact that one of the things which has been added to the contract is the payment of fees for x-ray and radium therapy for the treatment of neoplastic diseases. This one item will give the policy wider appeal.

2. *Committee on Medical and Nursing School Scholarships.* DR. CLARK, chairman, reported that his committee is now in the process of selecting individuals for three nurses' scholarships and one medical school scholarship yet to be awarded. One girl failed, which makes that scholarship available, in addition to one from Mr. Meyer of Hammond and one from the Krannerts of Indianapolis.

Dr. Clark asked that the councilors try to stimulate interest in scholarships in their various districts. "We originally stipulated that each girl would be allowed $200 a year. We feel now that that is a little more than they need. Anyone giving a scholarship through the association may earmark it for any place he wants it to go."

Budget. Dr. Clark reported that his committee is without funds. "As I understand it, when the $1200 was allowed for scholarships it was not budgeted. I therefore move you that the $1200 originally designated for this committee be budgeted to this committee." Motion seconded and carried.

"Another thing, there is a statewide committee formed for the promotion of registration of nurses, composed of representatives from the state hospital, state nurses' and state medical associations.

(Continued on Page 540)

Mothers

APPRECIATE THE SIMPLICITY OF PREPARING FEEDINGS



The preparation of Similac feedings requires only the addition of Similac powder to previously boiled, tepid water—in the proportions you prescribe. Mixing requires only 20 to 30 seconds. The simpler your directions to the mother, the less chance of error on her part. And simpler procedure in preparing feedings makes sanitation easier.

Physicians

LIKE THE UNIFORM RESULTS



Similac is simple to prepare . . . Modern . . . Ethical. It gives uniformly good results.

ACCEPTED by the AMERICAN MEDICAL ASSN Council on Foods and Nutrition

A powdered, modified milk product, especially prepared for infant feeding, made from tuberculin tested cow's milk (casein modified) from which part of the butter fat has been removed and to which has been added lactose, cocoanut oil, cocoa butter, corn oil, and olive oil. Each quart of normal dilution Similac contains approximately 400 U.S.P. units of Vitamin D and 2500 U.S.P. units of Vitamin A as a result of the addition of fish liver oil concentrate.



SIMILAC *Similar to breast milk*

M & R DIETETIC LABORATORIES, INC. • COLUMBUS 16, OHIO

(Continued from Page 538)

The members of my committee will serve as the medical committee of that state group. A lot of leg work will be done by the Junior Chamber of Commerce."

3. *Certification of honorary members.* On motion of Drs. Clark and Dodds, the Council accepted for honorary membership in the state association members presented by three county medical societies. The names of these members either were not submitted previously through oversight or they recently have become eligible for this classification.

Legislative Matters

DR. BEATTY, co-chairman of the Committee on Public Policy and Legislation, spoke of national and local legislative matters and of the work that his committee is attempting to do. Regarding rural medical care, he quoted figures which show that a real need exists for more doctors in general practice in rural communities of the state.

Dr. Beatty emphasized the need for additional help by his committee. "I would like to see that additional field person in the state office assigned as kind of a full-time secretary for the Committee on Public Policy and Legislation. If that is to be one of his important duties, I would suggest that he not be a doctor. The chap who has the best background for that work is one who has had newspaper experience, who has a pleasing personality, and who meets people well. I think that our committee alone could keep such a person busy. I hope that serious consideration will be given to the employment of this field secretary, who need not be a doctor."

DR. WRIGHT, co-chairman of the Committee on Public Policy and Legislation: I am perfectly in accord with the employment of this field secretary, but in January, Ray Smith, Dr. McCaskey, Dr. Nafe, and two or three others of us attended the interim meeting of the A.M.A. and three of the most valuable papers that I have ever heard on public relations were delivered at that meeting. It doesn't make a particle of difference how many public relations men we employ, if we don't clean our own house, they can't do a thing. I think it is high time that this Council take cognizance of that fact. A man by the name of Lester H. Perry, executive secretary of the Pennsylvania State Medical Society, is going to talk to our county society in several weeks. It will be time very well spent if you will plan to hear him. He put public relations right back in our own laps.

MR. STUMP: The Council should be informed of the fact that the Governor has given the State Board of Health and the School of Business Administration of Indiana University the task of studying and codifying the health laws of the state, county, and city health departments. I am a member of the advisory committee which has been appointed to assist in doing this work. Anything that any doctor might want to have included or considered in connection with that revision should be referred to the State Board of Health or to me. The plan is either to amend existing laws where necessary, or to adopt one entire law including all the health laws of the state.

New Business

1. *Election of alternate delegate to A.M.A.* On motion of Drs. Clark and Mitchell, Dr. E. S. Jones of Hammond was elected alternate delegate to the A.M.A. for the term expiring December 31, 1948, to succeed Dr. Forster, resigned.

2. *Nominations for Editorial Board.* Dr. Ramsey suggested that insofar as possible a cross section of the various branches of medicine be represented on the board, i. e., one from each of the sections.

Dr. Howard nominated Dr. Raymond F. Carmody, Gary. (Ophthalmology and otolaryngology.)

Dr. Garber nominated Dr. E. L. Cartwright, Fort Wayne. (Proctology.)

Dr. A. W. Cavins, Terre Haute (gynecology and obstetrics), was nominated at the January meeting of the Council.

Additional nominations are to be made at the July meeting of the Council.

3. *Improper medical testimony in industrial cases.* DR. SPOLYAR, director of the Division of Industrial Hygiene of the Indiana State Board of Health, and a member of the Committee on Industrial Health of the Indiana State Medical Association, reported on a meeting of his committee which was held on March 7. "Among the various activities of the committee which were discussed at this meeting was that of medical testimony in the courts. The committee felt that something should be done to 'level off' the testimony before our industrial boards and courts. After study of this problem the committee found that in 1945 the House of Delegates adopted a plan that would cope with this situation. In its annual report for that year the Industrial Health Committee submitted an outline, containing some five or six points, entitled, 'Relationships Between Industrial and Private Physicians.' Item 6 is the one I would like to call to the attention of the Council, which reads as follows:

> "'6. Medical Testimony before the State Industrial Board:
>
> "'Any member of the society who has submitted expert medical testimony at a hearing before the State Industrial Board, in a suit for compensation, may petition the Council to review all of the medical testimony submitted at that hearing. The petition must be made after a final decision in the case has been reached. The council will have discretionary power in the matter of deciding whether or not to review the case. Once the decision has been made to review, the Council will make a reasonable effort to arrange a convenient time and place for the review. All of the physicians who submitted testimony at the hearing in question will be apprised of that time and place, and must be permitted to attend the review. The society has the duty to censure any

to help vanquish depression marked by "morning tiredness"

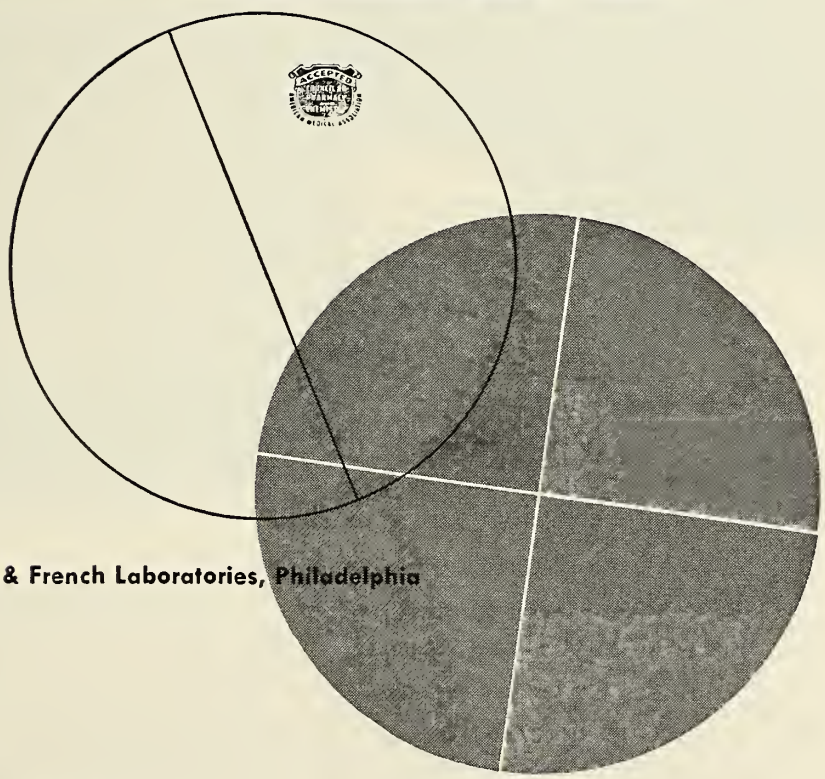
Many depressions are marked by morning tiredness, inertia, lassitude and retardation. 'Benzedrine' Sulfate, taken on awakening, frequently helps to lift the patient "over the hump" of the early hours.

Benzedrine Sulfate—where it shortens, eases, or even eliminates the patient's struggle with depression—may improve the tone of his entire day. While not always effective, Benzedrine Sulfate therapy certainly merits a fair clinical trial in depression marked by morning tiredness.

Tablets Capsules Elixir

Benzedrine* Sulfate

One of the fundamental drugs in medicine



Smith, Kline & French Laboratories, Philadelphia

*T.M.REG.U.S.PAT.OFF. FOR RACEMIC AMPHETAMINE SULFATE, S.K.F.

of its members for apparently flagrant deviations from the society's standards of competency and honesty, as revealed in such a review.'

"This report was adopted and passed by the House of Delegates.

"I was asked by the committee to appear before the Council today, (1) to inform you of the committee's activities on these problems, and (2) to get approval of the Council to follow through on this plan. The committee feels that all that is needed is publicity in THE JOURNAL only, and no lay publicity. I merely point to the fact that we already have a plan that will take care of this thing very nicely, but we will need the Council's co-operation."

The chairman suggested that Dr. Spolyar and Dr. Ramsey get together and work out some publicity for THE JOURNAL. Dr. Clark suggested that this matter probably could be handled better on the county level than on the state level.

On motion of Dr. Clark, duly seconded, the chairman was instructed to appoint a special committee to investigate this situation and to report to the Council at its next meeting. Dr. Howard was appointed chairman and Drs. Garner and Clauser members of the committee to make this investigation and to report to the Council and Dr. Spolyar.

4. *Committee on Veterans Affairs and Rehabilitation.* DR. CHARLES F. THOMPSON, chairman, reported that upon authorization of the Council and the Executive Committee, the association had effected a new agreement with the Veterans Administration to include a change in the fee schedule which has been the subject of criticism since November 1. The fees for x-ray and radium therapy have been changed to conform with what is paid in other states and with what was paid prior to November 1. This new agreement is effective until June 30.

The approval of an agreement after June 30 for a period of one year will be considered by the Committee on Veterans Affairs and Rehabilitation and this committee will submit to the Council later its recommendation with regard to renewal of the agreement with the Veterans Administration.

"There are one or two things in this agreement of which the Council should have knowledge and which should be published in the state journal. First of all, this agreement covers only provisions for 'services to veterans, beyond those services available to the Veterans Administration in existing V. A. facilities and installations.'

"The other points in this agreement are that 'any doctor can be removed from the list of fee-basis physicians any time he wishes' and 'fees may be adjusted at any time on short notice' without the necessity of cancellation of the existing agreement.

"Dr. Glen Lee, of Richmond, formerly chief medical officer for Selective Service in Indiana, will represent the association at the meeting of the Council on National Emergency Medical Service in Chicago on April 5 and 6."

5. *Hospital Standards Committee.* Dr. Dodds, chairman, had no report to make at this time.

6. *Public Relations.* DR. J. NEILL GARBER, chairman of the Committee on Public Relations, presented the following report:

The committee on public relations held its first meeting on March 21.

Introduction

Your committee feels a deep responsibility in the inauguration of a medical public relations program for Indiana, and believes that such a program should be constructed on a foundation of principles which can be started at once and made workable over the years to come. Naturally, changes will have to be made as the program develops, and suggestions which we may make will certainly generate new and improved ones as interest grows. It is our job to impress each member of the association with the importance of improving our public relations, and then when these men ask, "What can we do?", suggest to them a concrete plan which can be carried out in their own communities.

It is an error for us to plan a program in the heat of enthusiasm and then, as the months pass, to let interest wane and disappear. All aspects of the problems as they arise in our state must be analyzed and solutions attempted; this must be a continuous process.

These problems should be approached in a calculated fashion. Not only must we, the members of this committee and the Council, but also all the doctors in the state, be ready to listen to criticism and to accept public relations as a reality even though that opinion is based upon misinformation. We must be willing to submit to truth, frankness, and realize at once that some of the difficulties, at least, are within our own group and must be corrected by our own organization.

Before starting out on an expansive public relations program, it would seem that its foundation must be firm in order to support its superstructure. How can we convince the public of our good intentions and of our real interest in public welfare while we at the same time, ostrich-like, either ignore or neglect to correct shortcomings within our society? There must first be a housecleaning before we can truly go ahead to real accomplishment. Both the local and the national press have pointed out errors in practice and negligence in policing of medical practice. Unless we accept the challenge and do this ourselves, some other group will do it for us—the national government.

Proposals

1. A field secretary, preferably not a doctor (this man should be appointed with an eye as to his ability as a public relations representative), whose job is, first, that of public relations, but who can assist the Committee on Education in its postgraduate programs. After all, everything that we do, individually or collectively, is directly or indirectly involved with and affects our public relations.

(Continued on Page 544)

For surface infections...



New and Nonofficial Remedies · 1947 · states: "NITROFURAZONE.—Furacin... possessing bacteriostatic and bactericidal properties . . . effective in vitro and in vivo against a variety of gram negative and gram positive bacteria . . . is useful for topical application in the prophylaxis and treatment of superficial mixed infections common to contaminated wounds, burns, ulceration and certain diseases of the skin . . . Variant bacterial strains showing induced resistance to sulfathiazole, penicillin or streptomycin are as susceptible to nitrofurazone as their parent strains . . ." Furacin N.N.R. is available in the form of Furacin Soluble Dressing containing 0.2 per cent Furacin. This preparation is indicated for topical application *in the prophylaxis and treatment of infections of* wounds, second and third degree burns, cutaneous ulcers, pyodermas and skin grafts. *Literature on request.* EATON LABORATORIES, INC., NORWICH, N. Y., — TORONTO, CANADA

(Continued from Page 542)

Qualifications: young; newspaper experience; tactful; diplomatic; knowledge of medical affairs; able to meet all classes; ability as public speaker; honest; and with a deep impression of the importance of his duties; discreet; poised; socially acceptable.

2. Combined press-radio medical society dinner—work out a "code of understanding," leading to better relations between press and medicine, in matter of news dissemination.

3. Medical service availability—urge county societies to work out a plan to make medical service available at all times. The Marion County Medical Society has already put such a program into action, under the chairmanship of Dr. Earl Mericle. Details upon request.

4. Woman's Auxiliary—closer direction and cooperation with this organization. Supervision of speakers' bureau. Cooperative projects with women's clubs, schools, churches and other organizations. Day-by-day check on press and radio publicity. Auxiliary to the Indianapolis Medical Society already working on nurses' training candidates.

5. Speakers' Bureau. Much care, planning and selection necessary. Men must know subjects intimately, but also must be good public speakers in every sense. They must not be selected merely because they would like to appear or because they have the time. They must be able to present an attractive appearance and to speak well.

6. Board of Supervisors—state level—suggest 12 members, to hear and analyze all complaints of inadequate medical service, overcharging, etc. Will accept verbal or written complaints, investigate unethical practice, and may bring charges at any level in society or in court.

7. Monthly news letter—brief notes—well spaced—attractive and concisely presented; one of functions of field man in conjunction with state office. An attempt through this and other media to make each physician feel that he is charman of his state society's committee on public relations. The most important single factor, as pointed out by all public relations counsels, is the individual physician.

8. Physicians are to be encouraged to participate in local health and civic clubs, and in other community projects.

9. More action in editorial board—closer supervision. All articles—editorials in particular—be submitted to this board before publication. Reaction of several to impressions essential, e.g., state and Marion County periodicals. Board not to be considered as a critical body but rather as a helpful group.

10. State and county Committees—more of the former. Suggestion for your consideration—the inclusion in certain of the committees of lay personnel would provide great value in presenting lay side of certain matters, impress the public with our conscientious efforts in their behalf.

11. Advertising space in newspapers.

12. Rural medical service. Encourage doctors to go into smaller communities in groups of 2 or 3—to provide mutual stimulation, allow time off, and give much more efficient service. Would also make rural areas more attractive—have essential lab and x-ray facilities, etc.

Summary:

The best source of good medical public relations and good publicity is CONSCIENTIOUS SERVICE BY THE PHYSICIAN TO HIS PATIENTS, CONSTRUCTIVE SERVICE BY ORGANIZED MEDICINE TO THE PUBLIC-AT-LARGE. Chief criticism hinges on these points:

1. Overcharging.

2. Unethical practice—such activities on the part of a few members in a large group such as ours should not and must not be allowed to jeopardize the conscientious efforts of an overwhelming majority.

3. Inability to get medical care.

Solution of these problems would eliminate at least 80 per cent of our public relations difficulties.

Following discussion by Drs. Clark, Hauss, Nafe, Dodds, Howard and McCaskey, Dr. Paul A. Garber moved "that the Council commend Dr. Garber on his report and that when we hire a field secretary this report be turned over to him for his report and action to us." Motion seconded by Dr. Mitchell, and carried.

7. *Red Cross blood bank program.* Following discussion by Drs. Nafe, Howard, Dodds, Ellison and Hauss, Dr. Howard moved "that the Council instruct the delegates to favor establishment of blood banks by the Red Cross only in communities where one does not already exist and only under the direction and control of the medical profession." Motion seconded by Dr. Mitchell, and carried.

8. *Matters referred to Council by Executive Committee.* Dr. McCaskey, chairman of the Executive Committee, reported as follows:

(1) *Dates for 1949 meeting.* As the dates previously set, October 4, 5, 6, and 7, are in conflict with the dates set for the 1949 Wisconsin State Medical Society meeting, the Executive Committee suggests September 26, 27, 28 and 29, 1949, which would not conflict with any other state meeting. On motion of Drs. Clark and Garber the Council approved holding the 1949 annual session on September 26, 27, 28 and 29.

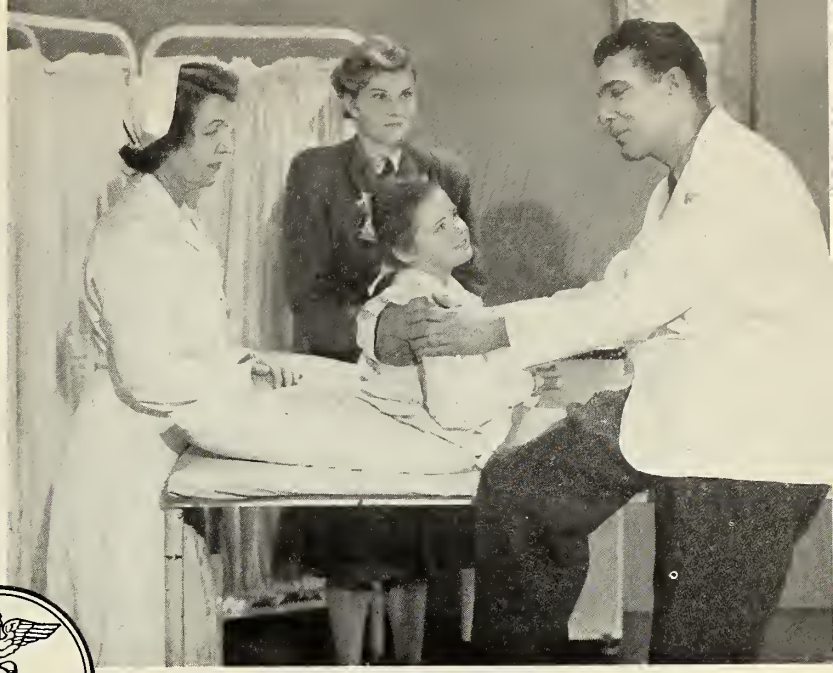
(2) JOURNAL *salary increases.* On motion of Dr. Mitchell, duly seconded, increase in salary was approved for the two JOURNAL office employees, effective April 1, 1948.

(3) *Increase in* JOURNAL *advertising rates.* On motion of Drs. Clark and Garber, the Council approved increasing JOURNAL advertising rates, effective January 1, 1949.

(4) *Protest against editorial, "Kickbacks," in March* JOURNAL. The executive secretary read a letter from the Indianapolis Medical Society in protest to an editorial entitled "Kickbacks" in the March JOURNAL.

(Continued on Page 546)

we made Doctors' Plan easy to use



approved by *the Indiana medical profession*

One of the most popular features of the Indiana Doctors' Plan is the ease with which the public may use the Plan. When your patients present their membership cards to you indicating that they are members of "The Doctors' Plan," you know that they have expressed their faith in you and desire to cooperate with the profession in making a voluntary prepayment plan workable rather than be forced to participate in a compulsory program.

In presenting their membership cards to you, as their doctor, they expect you to fulfill the promises made them when they became a member. They were promised that when they presented their card that you, as their doctor, would recognize their membership—that you would prepare a claim form and forward it to your own Plan, which in turn would send the member a check in accordance with the schedule of indemnities—the check to be drawn jointly to the member and the doctor. The member would then endorse the check and hand it over to you, to apply on your charges.

Not only are we providing a way for the public to prepay the cost of obstetrical care, costly and unexpected surgical procedures, but we are also providing a way of guaranteed collection for the medical profession. Your support and your recommendation of the Plan can do much for its advancement.

Tell your patients about

THE DOCTORS' PLAN

Our own Plan for prepaid medical care

—FACTS—

September 1, 1946
to March 1, 1948

MEMBERSHIP
OVER 160,000

Claims Paid
10,175

Amount Paid
$515,786.00

Help create a local demand—we will fill it

MUTUAL MEDICAL INSURANCE, Inc.

700 TEST BUILDING INDIANAPOLIS 4, INDIANA

(Continued from Page 544)

Following discussion by Drs. Clark, Nafe and Ellison, on motion of Drs. Mitchell and Garber, the Council instructed the executive secretary, as managing editor of THE JOURNAL, to scrutinize all articles in which controversial subjects are discussed that are submitted for publication in THE JOURNAL for anything detrimental from a public relations standpoint, from the viewpoint of both the profession and the public, and authorized him to hold up any questionable article until it is reviewed by the Editorial Board.

9. *General practice award.* On motion of Drs. Mitchell and Garber, the Council authorized the solicitation of each county society to nominate, if it wishes, a member to be considered to receive the outstanding general practitioner award in Indiana, the person nominated not to be an officer, past president, or councilor of the Indiana State Medical Association.

10. *Employment of field secretary.* On motion of Drs. Clark and Mitchell, the Executive Committee was authorized to interview several individuals, who need not be physicians, who might serve as field secretary, and present these individuals to the Council at a future meeting, preferably at the July meeting, if possible.

On motion of Drs. Howard and Garber, the words, "who shall be a physician," are to be stricken out of the motion passed previously by the Council.

11. *Newspaper article.* Article giving the medical profession's side of the story on the shortage of physicians, referred to the Council by the Publicity Committee, was approved on motion of Drs. Clark and Dodds for release to the county medical societies, with the recommendation that they use it in substance or as an outline or guide to publicity that will strengthen the doctor's position in the community.

12. *Conference on School Health and Physical Education.* Dr. Nafe gave an outline of the program that has been planned for the Conference on School Health and Physical Education which is to be held in Indianapolis on October 6. Approval of the Council of this program was taken by consent.

13. *Alternate councilors.* Dr. Clark offered the suggestion that it might be well to limit the term of any elective office in the Indiana State Medical Association, and that alternate councilors, who would attend meetings and familiarize themselves with what is going on, should be elected with the idea of bringing new blood into the organization which would be able to take over, if necessary. "Regardless of whether or not we limit the length or the number of terms, I think we should have alternate councilors. I bring this up for some serious thought, to be discussed at the next meeting of this Council."

14. *July Council meeting.* By consent the next meeting of the Council was set for July 11, 1948.

There being no further business, the meeting was adjourned.

EXECUTIVE COMMITTEE

April 3, 1948.

Roll call showed the following present: C. H. McCaskey, M.D., chairman; Cleon A. Nafe, M.D.; A. P. Hauss, M.D.; Alfred Ellison, M.D.; Frank B. Ramsey, M.D.; A. F. Weyerbacher, M.D.; Albert Stump, attorney, and Ray E. Smith, executive secretary.

Membership Report

Number of members March 31, 1948	3,414*
Number of members March 31, 1947	3,278
Gain over last year	136
Number of members Dec. 31, 1947	3,618

* Includes 51 in military service (gratis), 163 honorary members.

Treasurer's Office

The treasurer reported that a $5,000 United States Treasury bond, Series G, had been purchased from the general fund checking account.

1948 Annual Session, Indianapolis, October 26, 27 and 28, 1948.

Annual banquet. It was taken by consent that the chairman of the Indiana delegation to the American Medical Association and the executive secretary should present an invitation to the president-elect of the A.M.A., immediately upon his election in June, to speak at the annual dinner of the Indiana State Medical Association.

1949 Annual Session, Indianapolis

On motion of Drs. Nafe and Hauss, the Executive Committee is to recommend to the Council that the dates of September 26-29, 1949, be approved for the 1949 annual session, in view of the fact that the dates previously selected, October 4-7, 1949, conflict with the annual session dates of the Wisconsin State Medical Society.

Statements of receipts and expenditures for February and March for the association and THE JOURNAL were approved.

Secretaries' Conference Expenses

On motion of Drs. Hauss and Ellison, the expense of holding the annual Secretaries' Conference is to be called to the attention of the Council with a view to placing a limit in the future on expenses for out-of-state speakers.

Legislative Matters

National

On motion of Drs. Ellison and Nafe, the president-elect was authorized to attend the National Health Assembly in Washington, D.C., May 1 to 4, 1948.

On motion of Drs. Nafe and Hauss, the executive secretary was instructed to convey the thanks of the committee to Mr. M. E. Noblet, president of the Indianapolis Accident and Health Club, for submitting copy for the club's pamphlet on "What Price Security?"

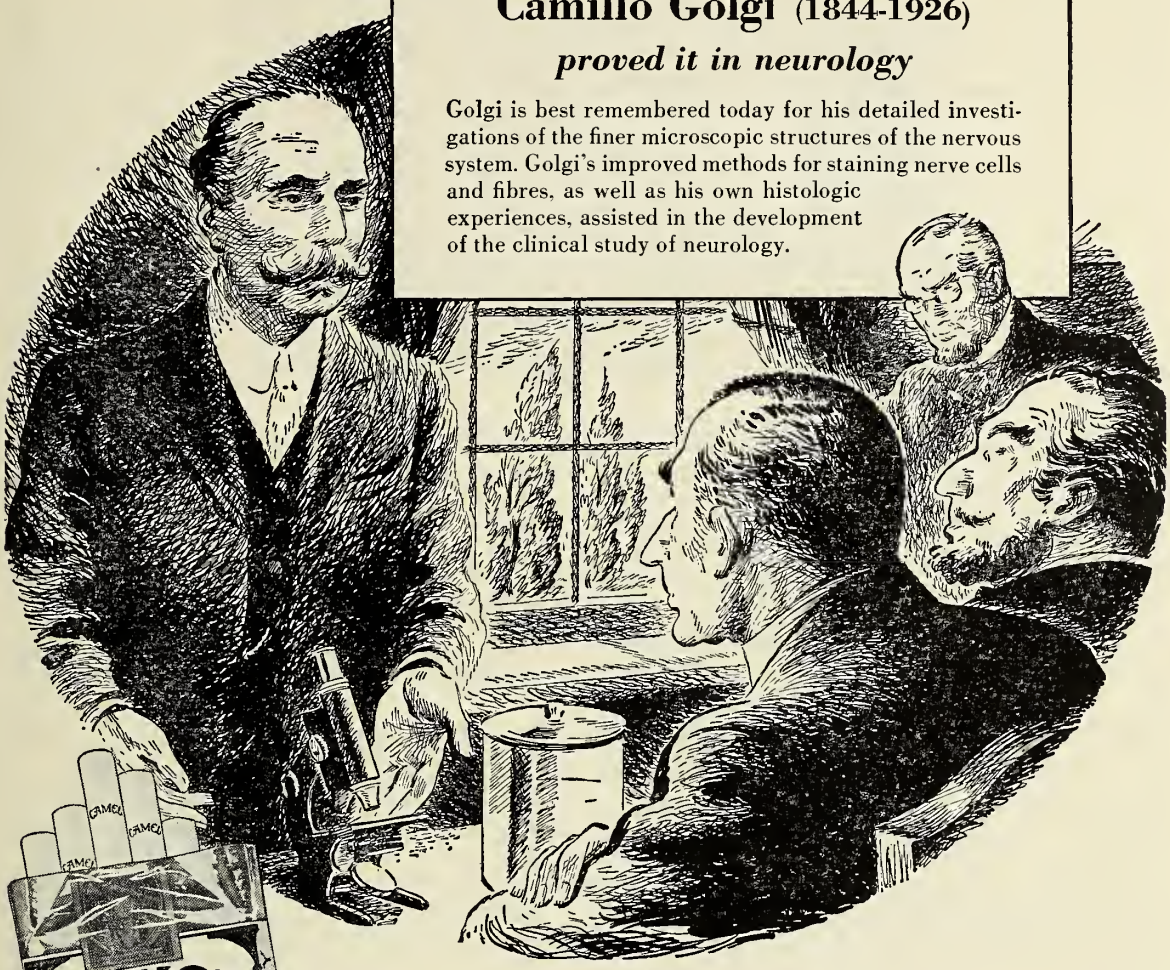
(Continued on Page 548)

Experience is the Best Teacher

Camillo Golgi (1844-1926)

proved it in neurology

Golgi is best remembered today for his detailed investigations of the finer microscopic structures of the nervous system. Golgi's improved methods for staining nerve cells and fibres, as well as his own histologic experiences, assisted in the development of the clinical study of neurology.





R. J. Reynolds Tobacco Company
Winston-Salem, N. C.

Experience is the best teacher in cigarettes, too!



With millions of smokers who have tried and compared different brands of cigarettes, Camels are the "choice of experience." Try Camels! See how your taste welcomes the rich flavor of Camel's choice, properly aged, expertly blended tobaccos. See if your throat doesn't find Camel's cool mildness mighty pleasing.

Yes! Let your own experience tell you why more people are smoking Camels than ever before.

According to a Nationwide survey:

More Doctors Smoke CAMELS
than any other cigarette

Three leading independent research organizations in a nationwide survey asked 113,597 doctors what cigarette they smoked. The brand named most was Camel!

(Continued from Page 546)

Local

On motion of Drs. Nafe and Ellison, the request from the hospital staff of the Porter County Hospital for revision of the Hospital Organization Act, permitting appointment of a physician to the hospital board, was referred to the attorney for answer, with the instruction that it be suggested that the Porter County Medical Society delegate present the matter to the House of Delegates at its next meeting.

Organization Matters

Membership in Indiana Public Health Association. On motion of Drs. Hauss and Nafe the Executive Committee voted to take a $10.00 a year corporate membership in the Indiana Public Health Association.

Protest against the report of the Committee for Improvement of Child Health of the American Academy of Pediatrics. On motion of Drs. Nafe and Ellison, it was voted to ask the Indiana State Society of Pediatrics for its opinion of this report.

"Save the Shades." On motion of Drs. Hauss and Nafe, it was decided to carry an article about the campaign for funds in THE JOURNAL and to write the Governor that it is the policy of the association, since its individual members support such campaigns, not to subscribe as an organization.

Board of Directors' meeting, Indiana State Chamber of Commerce. The executive secretary was authorized to attend this meeting on motion of Drs. Nafe and Hauss.

Indiana chairman for National Conference of County Medical Society Officers. It was taken by consent that Dr. A. M. Mitchell of Terre Haute should continue as Indiana's chairman.

Woman's Auxiliary Advisory Committee. On motion of Drs. Ellison and Nafe, the Executive Committee was designated as advisory committee to the Woman's Auxiliary to the Indiana State Medical Association. This action supersedes that taken by the House of Delegates on September 25, 1929, and by the Executive Committee on October 8, 1929, in which the Committee on Publicity was assigned this duty.

Conference on Public Health Services, Spring Mill Park, April 21 and 22, 1948. The president, president-elect, and executive secretary were authorized to attend this meeting.

Medical Economics

Letter from Indiana manager, Mutual Benefit Health and Accident Association, explaining its cancellation provision, was read, in which he said, "The non-cancellable endorsement definitely holds the Company to the contract and the only way we could refuse a premium would be to refuse them all, and I don't think we will ever undertake to do that, considering the more than 1,000 Indiana doctor policyholders we have now."

Practice of life insurance company in accepting illness reports from unlicensed practitioners. It was taken by consent that, while the committee condemns such practice, it is the responsibility of the Indiana State Board of Medical Registration and Examination to notify the insurance company that such action makes it a party to a violation of the Indiana criminal law.

Protest against A.M.A. discontinuing Blue Cross for its employees. Upon motion of Drs. Nafe and Hauss the president and executive secretary were directed to write to the secretary and general manager setting out that the A.M.A. action was jeopardizing the prepayment medical care plans relationship with Blue Cross and ask why the A.M.A. did not renew its contract with Blue Cross.

Red Cross Blood Bank

The committee went on record as approving the Red Cross blood bank program in principle if done with the cooperation of the medical profession at the county level. The president and executive secretary were instructed to notify the delegates to the A.M.A.

Indiana Cancer Society

Article VI of the proposed by-laws of the Indiana Cancer Society pertaining to membership of the Board of Directors was approved by consent.

The Journal

Report on advertising:

Increase, February and March	$774.55
Decrease	71.40
Total increase, February and March	$703.15
Total increase for year	$1,123.58

Protest of Indianapolis Medical Society on "Kickback" editorial was referred to the Council.

On motion of Drs. Ellison and Nafe, a new salary scale for women employees in THE JOURNAL office was approved by the Executive Committee and was referred to the Council for action.

Proposed new schedule of advertising rates was referred to the Council.

The executive secretary gave comparative figures on the costs of the Indiana and Michigan journals, which revealed that the higher profit shown by the Michigan Journal is due principally to the fact that Michigan charges only a few overhead expenses against its income from THE JOURNAL.

Request for Reprints of "Loopholes in Disability Insurance." The request of the Bridgeport, Connecticut, manager of the Massachusetts Indemnity Insurance Company for reprints of the article, "Loopholes in Disability Insurance," in the November issue of THE JOURNAL, was not approved, on motion of Drs. Hauss and Nafe. It was suggested to the manager that he endeavor to have the article reprinted in the New England Medical Journal so that the article would be brought to the attention of the physicians in this territory.

There being no further business, the meeting was adjourned.

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COMMITTEE ON PUBLICITY

March 5, 1948

Present: Homer G. Hamer, M.D., chairman; James O. Ritchey, M.D.; Marlow W. Manion, M.D.; Cleon A. Nafe, M.D., and Ray E. Smith, executive secretary.

"Hints on Health" columns were approved, as follows:

Week of April 5, 1948—"Teeth Need Checking."

Week of April 12, 1948—"Physical Exertion."

Week of April 19, 1948—"Exercise of the Feet."

The secretary announced that 145 weekly newspapers are now receiving "Hints on Health," 109 of which asked for the column in mat form.

The A.M.A. radio transcription, "Medicine Serves America," was selected to succeed the present WFBM program, "Before the Doctor Comes," which ends on Saturday, March 27, 1948.

News and editorial material received from Lawrence W. Rember, executive assistant to Dr. George F. Lull, secretary and general manager of the American Medical Association, about rebates and fee splitting was reviewed.

COMMITTEE ON PUBLICITY

March 19, 1948

Present: Homer G. Hamer, M.D., chairman; James O. Ritchey, M. D.; Marlow W. Manion, M.D.; Cleon A. Nafe, M.D., and Ray E. Smith, executive secretary.

The following "Hints on Health" news release was approved:

Week of April 26, 1948—"Spotted Fever."

A news release for mailing to daily and weekly papers on April 2, 1948, as follows, was approved:

"Gardening Is Good for Mind and Body as Well as Budget."

A radio script for April 3, 1948, submitted by the Radio Committee of the Woman's Auxiliary to the Indiana State Medical Association, entitled, "Rheumatic Fever," was approved.

Copy of an advertisement, "The Rebellion of the British Doctors," which the Committee on Public Policy and Legislation desired to run in *The Indiana Publisher*, was approved.

Speakers were provided, as follows:

April 1, 1948—Fountain-Warren County Medical Society, Kingman.

April 9, 1948—Woman's Auxiliary to the Floyd County Medical Society, New Albany. Subject: "Legislation Threatening Freedom of Medical Practice."

COUNCILOR DISTRICT MEETING

TWELFTH DISTRICT

Dr. Benjamin F. Pence of Columbia City was elected president of the Twelfth District Medical Society at the annual meeting held in Hotel Van Orman in Fort Wayne on April 6. Dr. Edward H. Schlegel of Fort Wayne was elected vice-president and Dr. Karl M. Beierlein of Fort Wayne was re-elected secretary-treasurer.

The scientific program was provided by the University of Michigan Medical School, as follows:

"Congenital Abnormalities of the Urogenital Tract," by Dr. Stanley I. Glickman, instructor in surgery.

"Surgical Treatment of Congenital Abnormalities of the Gastro-Intestinal Tract," by Dr. Robert Buxton, assistant professor of surgery.

"Fluid and Electrolyte Balance in Infancy and Childhood," by Dr. James L. Wilson, professor of pediatrics.

Dr. Cleon A. Nafe of Indianapolis, president of the Indiana State Medical Association, spoke on "Better Public Relations for the Medical Profession." Dr. Paul A. Garber of South Whitley, councilor of the district, and Ray E. Smith, executive secretary of the association, also spoke briefly.

LOCAL SOCIETY REPORTS

Cass County Medical Society members met at Memorial Hospital, in Logansport, on March nineteenth. Dr. E. L. Hedde, of Logansport, spoke on "Skin Grafting," and illustrated his talk with slides. Seventeen members attended the meeting.

Elkhart County Medical Society held a meeting at the Hotel Elkhart, in Elkhart, on April first. Dr. Lawrence A. Pomeroy, from Western Reserve University, in Cleveland, addressed the group on "Carcinoma of the Uterus."

Fayette-Franklin County Medical Society members met on March ninth at the Country Club in Connersville. All registered nurses in the community were invited to attend the meeting, when Mrs. Mary Pickett, R.N., consultant with the Southeastern Branch of the Indiana State Board of Health, addressed the group on "Public Health Nursing in the Community."

Fort Wayne (Allen) County Medical Society members held a business meeting and hospital staff clinic at Methodist Hospital, in Fort Wayne, on March sixteenth. Thirty-five members were present.

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Grant County Medical Society held a meeting in Marion, on February twenty-sixth. Dr. J. P. Powell, of Marion, spoke on "Dyspareunia," and Dr. L. L. Renbarger, of Marion, spoke on "Treatment of Jaundice in the Newborn." Twenty-four members were in attendance.

Greene County Medical Society members met at Freeman Greene County Hospital, in Linton, on March eleventh. The twelve members present viewed a motion picture on gall bladder surgery and suture preparations and material.

Hamilton County Medical Society held a meeting in Carmel on March ninth, when Dr. Frank Gastineau, of Indianapolis, spoke on "Present Day Trends in Dermatology." Twenty members were present.

Howard County Medical Society members met in Kokomo on February sixth. The guest speaker was Dr. Kenneth L. Craft, of Indianapolis, who spoke on "Allergy." Twenty-four members were in attendance.

At another meeting, on March fifth, Dr. John H. Warvel, of Indianapolis, addressed the twenty-four members who were present on "Diabetes Mellitus."

Lake County Medical Society members met at St. Margaret's Hospital, in Gary, on March eleventh. Guest speaker was Dr. Meyer Perlstein, of Chicago, whose subject was "Non-Surgical Aspects of Cerebral Palsy."

Madison County Medical Society members met in Anderson, on March fifteenth. Dr. Russell Henry, of Indianapolis, addressed the forty-one members present on "Tuberculosis and Other Diseases of the Chest."

Parke-Vermillion County Medical Society held a meeting on March seventeenth at the Vermillion County Hospital in Clinton. The ten members present heard Dr. Paul Humphrey, of Terre Haute, discuss "Some Urological Aspects in Women."

St. Joseph County Medical Society held a meeting at the Indiana Club, in South Bend, on March ninth. Dr. Joseph T. Gettelman, of South Bend, spoke on "Experiences with Streptomycin in Tuberculosis." Fifty-three members and six guests were present.

Another meeting was held on March twenty-fourth, at the LaSalle Hotel in South Bend. The guest speaker at this meeting was Dr. M. H. Knisely, from the Department of Anatomy, University of Chicago School of Medicine, whose subject was "General Presentation on Sludged Blood." Sixty-two members and sixteen guests were in attendance.

Vanderburgh County Medical Society members held a meeting at the McCurdy Hotel in Evansville, on March ninth. "The Doctor's Plan" was discussed by Mr. Albert Stump, Indiana State Medical Association attorney, Mr. Roscoe S. Saylor, Mutual Medical Insurance, Inc., executive vice-president, and Mr. Guy Spring, executive director of Blue Cross.

Wayne-Union County Medical Society members met at Reid Memorial Hospital in Richmond, on February twelfth. Mr. Robert E. Neff, of Indianapolis, addressed the group on "Problems of Hospital Administration." Thirty-one members and six guests were present.

At another meeting, on March eleventh, Dr. J. O. Ritchey, of Indianapolis, spoke on "Thiouracil and Allied Drugs." Thirty-three members were present at this meeting.

Wells County Medical Society held a meeting at the Caylor-Nickel Clinic, in Bluffton, on February sixteenth. An American Academy of Pediatrics' sound film on "The Problem Child" was shown. Thirteen members and twelve guests were present.

At another meeting, on March fifteenth, an American College of Surgeons' film was shown, on "Anomalies of the Bile Ducts and Strictures of the Common Duct." Eleven members and two guests attended the meeting.

Whitley County Medical Society members held a meeting at the Thirty Club, in Columbia City, on March ninth. Dr. Arthur N. Ferguson, of Fort Wayne, was the guest speaker.

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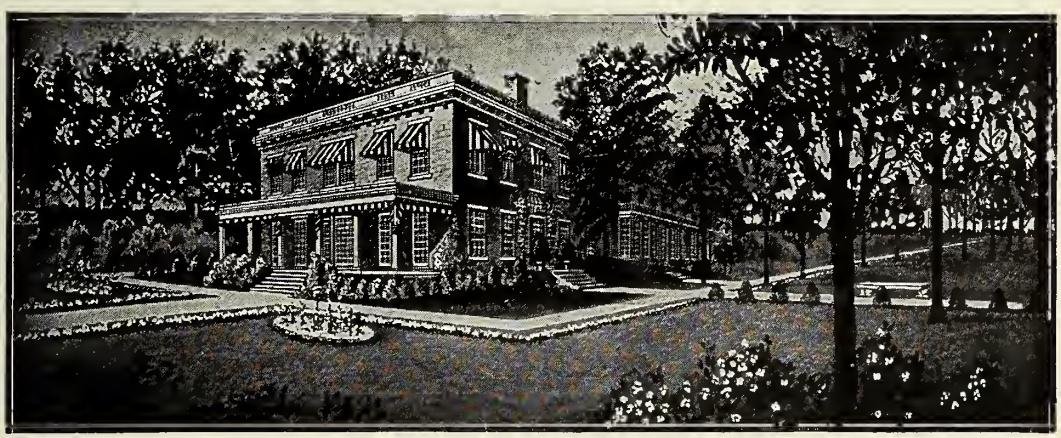
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INDIANA STATE BOARD OF HEALTH

Division of Communicable Disease Control

MONTHLY REPORT—JANUARY, 1948

Diseases	Jan. 1948	Dec. 1947	Nov. 1947	Jan. 1947	Jan. 1946
Brucellosis	9	10	11	25	1
Chickenpox	662	464	311	575	297
Infectious diarrhea	1	0	0	0	0
Diphtheria	44	49	73	58	62
Dysentery, Bacillary	1	1	0	0	2
Encephalitis	3	2	2	5	1
Erysipelas	1	2	1	6	2
Impetigo	5	2	13	12	11
Influenza	94	33	53	69	405
Infectious jaundice	1	0	0	6	1
Measles	1881	217	51	81	212
Meningitis, unspecified	5	9	8	7	12
Meningitis, influenzal	2	2	0	4	0
Meningitis, Meningococcic	5	2	3	5	0
Meningitis, streptococcic	1	0	0	1	0
Mumps	558	106	75	117	49
Pneumonia	72	48	42	91	36
Poliomyelitis	8	17	19	12	2
Rabies, animal	47	29	29	0	0
Rubella	11	5	8	8	2
Scabies	4	0	3	0	0
Scarlet fever	286	227	252	479	302
Septic sore throat	5	11	8	25	13
Smallpox	1	1	0	7	2
Tinea capitis	40	20	51	4	0
Trachoma	1	0	0	0	0
Tularemia	3	9	5	24	3
Vincent's angina	5	1	2	1	1
Whooping cough	164	180	274	132	83
Tuberculosis, pulmonary	214	146	223	227	196
Tuberculosis, other forms	15	13	23	21	8

MONTHLY REPORT—FEBRUARY, 1948

Diseases	Feb. 1948	Jan. 1948	Dec. 1947	Feb. 1947	Feb. 1946
Brucellosis	4	9	10	8	3
Chickenpox	579	662	464	498	273
Conjunctivitis	1	0	3	1	0
Diarrhea of the Newborn	4	1	0	0	0
Diphtheria	65	44	49	50	72
Dysentery, Bacillary	5	1	1	0	0
Encephalitis	3	3	2	6	2
Erysipelas	2	1	2	4	2
Impetigo	7	5	2	5	8
Influenza	110	94	33	162	200
Malaria	2	0	2	7	10
Measles	2707	1881	217	162	1150
Meningitis, unspecified	3	5	9	3	14
Meningitis, Influenza	2	2	2	3	..
Meningitis, Meningococcus	3	5	2	3	..
Meningitis, Pneumococcus	2	0	0	0	..
Mumps	766	558	106	139	90
Pneumonia	75	72	48	37	35
Poliomyelitis	1	8	17	2	1
Rabies, Animal	63	47	29	..	..
Rubella	32	11	5	0	5
Scarlet Fever	361	286	227	473	449
Septic Sore Throat	7	5	11	24	10
Smallpox	2	1	1	1	2
Tinea Capitis	9	40	20	59	0
Tularemia	2	3	9	5	5
Typhoid Fever	5	0	3	9	4
Vincent's Angina	4	5	1	1	1
Whooping Cough	161	164	180	181	80
Tuberculosis, pulmonary	149	214	146	139	163
Tuberculosis, other forms	20	15	13	3	12

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INDIANA STATE BOARD OF HEALTH

Division of Communicable Disease Control

MONTHLY REPORT—MARCH 1948

Diseases	Mar. 1948	Feb. 1948	Jan. 1948	Mar. 1947	Mar. 1946
Actinomycosis	1				
Brucellosis	7	4	9	10	9
Chickenpox	668	579	662	503	529
Conjunctivitis	2	1		5	1
Diarrhea, Infectious	3	4	1		
Diphtheria	37	65	44	52	57
Dysentery, Bacillary	1	5	1	2	1
Encephalitis	7	3	3	10	1
Erysipelas	2	2	1	2	2
Impetigo	3	7	5	2	7
Influenza	42	110	94	1250	74
Measles	3454	2707	1881	244	4374
Meningitis:					
Unspecified	6	3	5	4	13
Influenzal	2	2	2	1	
Meningococcic	1	3	5	3	
Staphylococcic	1				
Meningococcemia	1			1	
Mumps	811	766	558	248	192
Pneumonia	43	75	72	93	35
Poliomyelitis	4	1	8		3
Rabies, Animal	73	63	47		
Rubella	25	32	11	1	30
Scabies	5		4		
Scarlet Fever	298	361	286	544	517
Septic Sore Throat	1	7	5	24	42
Tinea Capitis	13	9	40	22	12
Tularemia	1	2	3	4	2
Typhoid Fever	1	5		8	4
Whooping Cough	121	161	164	127	109
Tuberculosis:					
Pulmonary	136	149	214	222	263
Other Forms	4	20	15	8	12

COMING MEETINGS

Indiana State Medical Association, Indianapolis, October 26-28.

American Medical Association Annual Meeting, Annual Meeting, Chicago, June 21-25.

American Association of Genito-Urinary Surgeons, Skytop, Pa., May 12-14.

American Association on Mental Deficiency, Boston, May 12-15.

American Ophthalmological Society, Hot Springs, Va., May 16-19.

American Pediatric Society, Quebec, Canada, May 24-26.

American Physiotherapy Association, Chicago, May 23-28.

American Psychiatric Association, Washington, D.C., May 17-20.

American Urological Association, Boston, May 17-20.

International Congresses on Tropical Medicine and Malaria, Washington, D.C., May 10-18.

Society of American Bacteriologists, Minneapolis, May 10-14.

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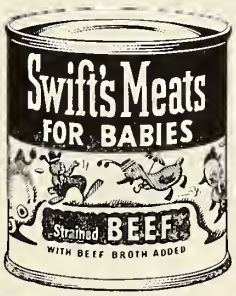
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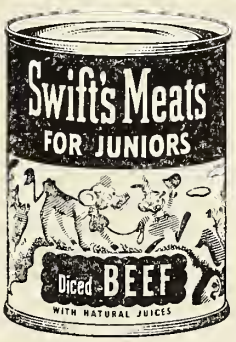
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NINETY-NINTH ANNUAL SESSION—INDIANAPOLIS, OCTOBER 26, 27 and 28, 1948

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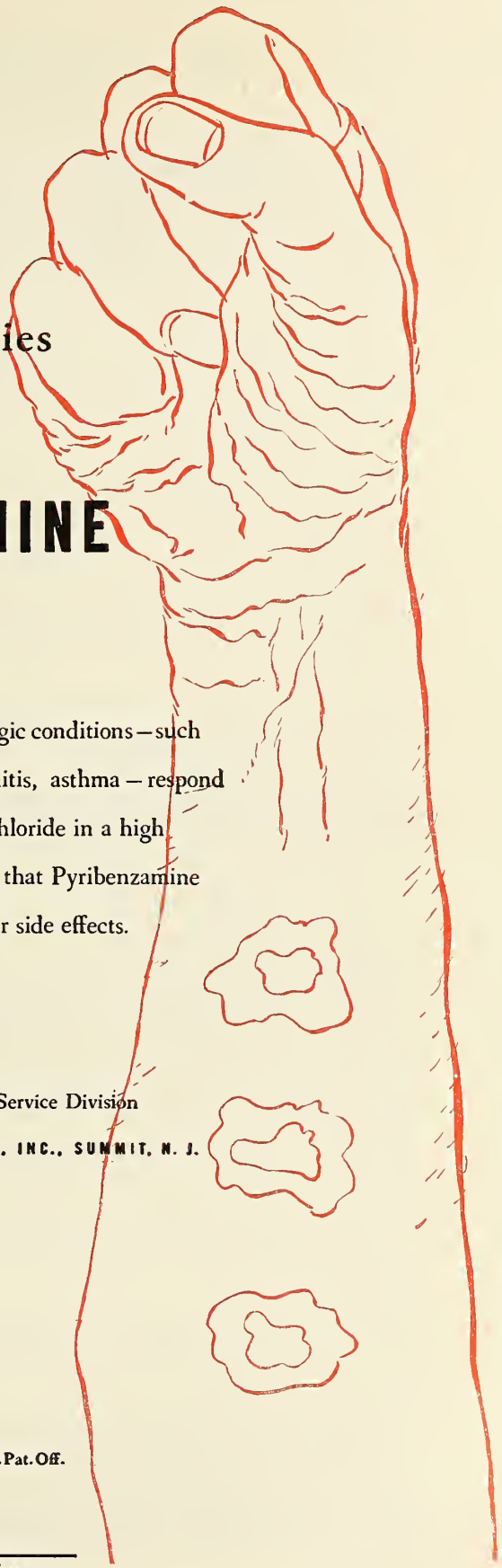
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ROCKY MOUNTAIN SPOTTED FEVER IN INDIANA: RECENT ADVANCES IN THERAPY*

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IRWIN SALKIN, M.D.

INDIANAPOLIS

ROCKY Mountain Spotted Fever (Black Fever, Blue Disease, Tick Fever, Spotted Fever) is endemic in Indiana. The Indiana State Board of Health reported 110 cases in a ten-year period from 1937-47 inclusive, and during the same period of time listed 32 deaths resulting from the disease, 29 percent mortality (Figure 1).

Rocky Mountain Spotted Fever has been reported in 47 of our 48 states and accounts for approximately 140 deaths annually in the United States. The disease increases in severity as one moves westward; the average figures for mortality are 25 percent for eastern states, 50 percent for the western states and 75 percent for the far west.

The Indiana University Medical Center mortality rate closely parallels that for the entire state, the figure being 28 percent. This figure is consistent with that reported for the surrounding states and the eastern states in general.

It is proposed to present:

(1) A survey of the incidence and geographic distribution of the disease in Indiana.

(2) A brief description of the disease and its vector.

(3) A comparison of the results of therapy over a ten-year period at the Indiana University Medical Center prior to and since the introduction of para-aminobenzoic acid (PABA) therapy.

(4) An outline of therapy with PABA.

(5) Differential diagnosis.

(1) INCIDENCE AND DISTRIBUTION

One hundred and ten cases have been reported to the Indiana State Board of Health in the ten-year period, 1937-1947.

Figure 1

INDIANA MORTALITY STATISTICS, 1937 - 1947.
ROCKY MOUNTAIN SPOTTED FEVER . . .

	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	TOTAL
JAN.												
FEB.												
MAR.												
APR.									1			1
MAY.						1					2	3
JUN.						1		1	1	1	2	6
JUL.			1		2		1		2		1	7
AUG.		2	2	1	3		1	2		1	2	14
SEP.		1										1
OCT.												
NOV.												
DEC.												
TOTAL		3	3	1	5	2	2	3	4	2	7	32

The age incidence is noteworthy. As Figure 2 illustrates, the majority of cases hospitalized occurred in children in the 1-9 year age group.

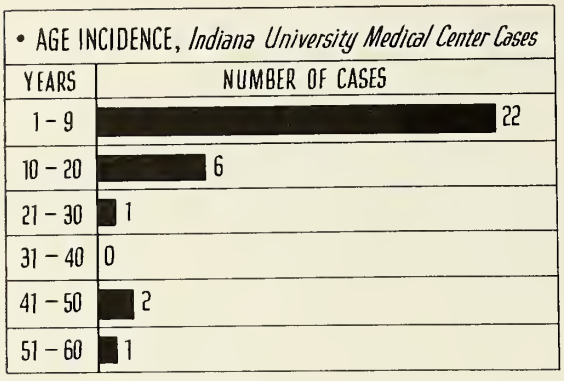
There is a general trend toward an increasing incidence of the disease in Indiana (Figure 3). This increase may be real or apparent.

Figure 4 illustrates distribution of the disease by counties. It will be noted that 84 percent of the cases occur below the northern border of Marion county—roughly, the southern half of the state.

The population of the counties which are heavily

* From the Department of Medicine, Indiana University Medical Center, Indianapolis.

Figure 2



wooded and which are most likely to harbor the tick is evidently most widely infected.

Figure 5 represents monthly variation in incidence of the cases studied at the Medical Center.

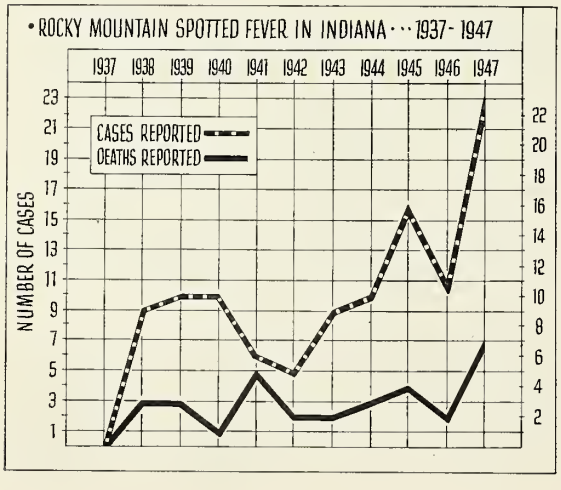
(2) Description of the Disease and Vector

Rocky Mountain Spotted Fever, an infectious disease, caused by a rickettsia (rickettsia rickettsi or dermacentroxenus rickettsi) and transmitted by a tick, has been known since the first settlement of white men in Montana and Idaho.

This rickettsial disease, like the other members of its group, is characterized by a self-limited fever and rash. The incubation period is from 2-12 days. It is an acute, specific infectious endangiitis, chiefly of the peripheral blood vessels. It is characterized by sudden onset, with chills, continued fever (usually terminating by lysis), severe headache, pain in the bones and muscles, and a macular eruption which becomes petechial. The rash characteristically appears on the second to the fourth day of illness, first on the wrists, ankles and back, then gradually becoming diffuse and generalized.

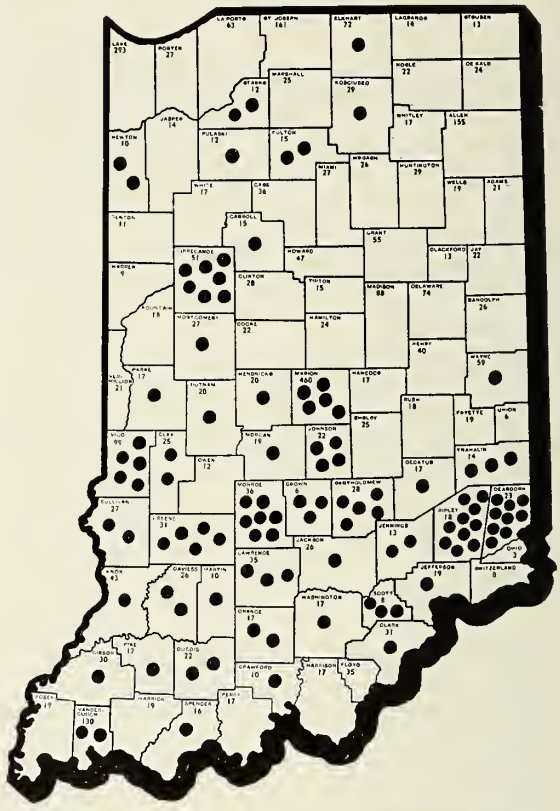
A common tick carrier, dermacentor variabilis (dog tick) may be prevalent in Indiana as early as March and becomes more abundant through June and July. (Figure 6). Blood is probably the

Figure 3



Rocky Mountain Spotted Fever
Geographic Distribution of Cases
1937-1942

Figure 4.



DISTRIBUTION OF ROCKY MOUNTAIN SPOTTED FEVER CASES REPORTED IN INDIANA, 1937 - 1947. (NUMBERS REPRESENT COUNTY POPULATIONS BY 1000's)

(1) Data compiled from statistics from Indiana State Board of Health.
(2) Cases include the 32 I.U.M.C. cases.
(3) No attempt to localize exact point in each county.

tick's only food. Unless the tick finds an animal host, the life cycle cannot be completed. Impregnated ticks can lay 300 eggs per day and usually lay from 2,000-7,000 eggs. Early forms feed on small rodent hosts. Later forms feed on larger animals, e.g., rabbits, dogs, foxes, deer, squirrels, and human beings. Adult ticks may live two years or more without a blood meal.

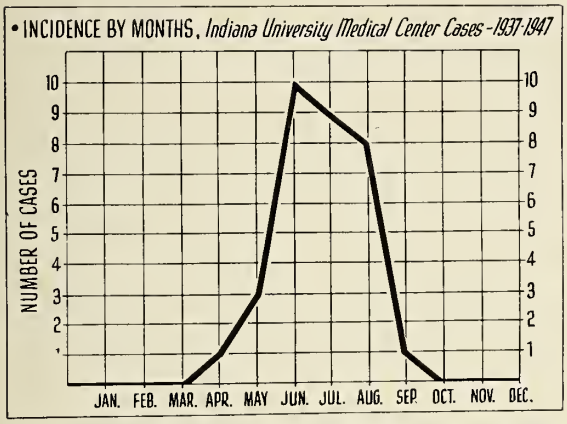
Rocky Mountain Spotted Fever is transmitted to human beings by inoculation of the virus by a tick contact. (It has been reported to pass through grossly unabraded skin).

The rickettsia is transmitted from generation to generation through eggs. Adult ticks may infect one another during mating. Hereditary transmission is a constant process. Only one in every three hundred ticks in heavily infected areas has been shown to harbor the rickettsia.

We have no knowledge of epidemiological control of the tick in Indiana. The increasing frequency of reported infection in Indiana may stimulate such control.

Indiana University Medical Center Cases Rocky Mountain Spotted Fever Incidence by Months

Figure 5.



(1) Figures compiled from statistics of cases hospitalized at the Indiana University Medical Center.

(3) Therapy and Results

Until the discovery of para-aminobenzoic acid (PABA), in 1942, as an effective chemotherapeutic agent against rickettsial diseases in experimentally infected animals, treatment for the most part had been symptomatic and supportive, and on the whole unsatisfactory.

The use of PABA therapy in Rocky Mountain Spotted Fever was suggested after the work of Snyder, Maier and Anderson in 1942.[1] These workers first used PABA for the treatment of typhus. Their results suggested that PABA inhibited the typhus organisms long enough for the individual to develop active immunity. Because of the close relationship of the organisms of typhus and Rocky Mountain Spotted Fever, Hamilton, Anigstein and Bader used PABA experimentally in Rocky Mountain Spotted Fever and found it to inhibit the organisms. Hamilton, after studies on the mode of action of PABA in Rocky Mountain Spotted Fever, suggested that an enzyme system is involved, since the amino and carboxyl groups must be in a para position if the drug is to be effective.[2] By using a control series of hen's eggs infected with rickettsia and another series infected with rickettsia to which PABA had been added, he was able to show that 100 percent of the controls died (58); and of those eggs treated with PABA only 54 percent of the embryos died (that is, 30 out of 56). Anigstein and Bader arrived at a similar conclusion after experimental work on guinea pigs.[3]

1. Snyder, J. C., Maier, J., Anderson, C. R.: Report to the Division of Medical Sciences National Research Council. December 26, 1942.
2. Hamilton, H. C.: Effect of Para Amino Benzoic Acid on Growth of Rickettsia and Elementary Bodies with Observations on Mode of Action. Exper. Biol. and Med., 220-226, 1945.
3. Anigstein, L., Bader, M. N.: PABA, Its effectiveness in Spotted Fever in Guinea Pigs. Science 101: 591-592: June 8, 1945.

Figure 6.



(1) Dermacentor variabilis (dog tick) laying eggs. (Photograph through courtesy of Dr. W. H. Headlee, Parasitologist, Indiana University Medical Center.)

Clinical use of PABA was first reported by Rose, et al., in December, 1945.[4] These observers noted clinical improvement 24 hours after the institution of PABA therapy in a woman, age 46, who had been bitten by a tick 12 days before therapy was begun. Several groups of investigators agreed that PABA is an effective agent in this disease.[5-6] The clinical course is rendered less severe and the morbidity and degree of toxicity of the disease are reduced. The mortality rate is also reduced. The mortality figures are apparently dependent to some extent on how soon therapy is instituted after the tick bite.[7-8]

In the series of cases studied at the Indiana University Medical Center, the mortality rate prior to PABA therapy was 33.3 percent (8 deaths in 24 cases).

Eight patients have been treated with para-aminobenzoic acid. In this group only one death occurred. (The patient, a 7 year old child, was admitted with a temperature of 106.0°. She received

4. Rose, H. M., Duane, R. D., Fischel, E. E.: The Treatment of Spotted Fever with Para Amino Benzoic Acid. J.A.M.A. 129: 1160-1161, December 22, 1945.
5. Tierney, N. A.; Effect of Para Amino Benzoic Acid in Tsutsugamushi Disease. J.A.M.A. 131: 280-285, May 25, 1946.
6. Flinn, L. B., Howard, J. W., Todd, C. W., Scott, E. G.: Para Amino Benzoic Acid Treatment of Rocky Mountain Spotted Fever. J.A.M.A. 132, No. 15, 911, December 14, 1946.
7. James, G. W., Walker, H.: Para Amino Benzoic Acid Treatment of Rocky Mountain Spotted Fever. Va. Med. Monthly, Vol. 14, 161, April 1947.
8. Tichenor, C. J., Rose, S., McClendon, P. R.: Rocky Mountain Spotted Fever—A Preliminary Report on Use of Para Amino Benzoic Acid. J. Ped., 1, July 1947.

the recommended doses of PABA with sodium bicarbonate every two hours. Her PABA blood level reached supra-therapeutic levels in 24 hours, namely 138 mgms.%. The CO_2 combining-power was 23 volumes percent on the day prior to death, as compared to 44 volumes percent upon admission.)

(4) An Outline of Therapy

PABA is insoluble in water or bicarbonate solution, and because of the large dosage it may be necessary to resort to Levine tube administration. PABA is prepared in 0.5 Gm. tablets and is usually given with sodium bicarbonate. It can be given intravenously or intramuscularly as a sodium salt. The average suggested dose is 0.3 to 0.5 Grams per pound, per 24 hours, in divided doses every two hours. This will usually bring the blood level to 15-40 mg. per 100 cc. Blood levels varying from 10 to 60 mg.% have been cited by different authors as being necessary for effectiveness.[6] Considerable variation in blood level has been noted from patient to patient and from time to time in the same patient using the same per pound dosage of the drug. An average dosage of one gram of sodium bicarbonate, orally every three hours, has been recommended in conjunction with the PABA. This is to avoid acidosis which may accompany PABA therapy. Regardless of the route of administration, an average dose of PABA is entirely gone from the blood within 4 hours. Therefore, the drug is usually given at two hour intervals.

PABA can produce leukopenia, granulopenia or acidosis. That the drug can produce drowsiness and even coma must be borne in mind during therapy. Daily white counts are indicated during therapy.

(5) Differential Diagnosis

The essential diagnostic criteria in the cases included in our study were:

(1) A clinical picture compatible with the disease.

(2) Positive agglutinations for Proteus OX-19.

(3) History of tick contact.

Ninety percent of our cases satisfied all three requirements. Ten percent satisfied two, i.e., (1) and (3) above. No doubtful cases were included in this review.

The differential diagnosis of Rocky Mountain Spotted Fever includes meningococcic meningitis and septicemia, typhus fever, typhoid fever, rheumatic fever, purpura, bacterial endocarditis, measles and allergic drug eruptions.

(6) Conclusions

Since the disease is carried by an insect vector, prophylaxis is a possible method of control. Destruction of the vector is a major epidemiological problem. The general population should be instructed on the points concerning:

(1) The presence of the disease in the state.

(2) Prevention of tick contact.

(3) Recognition of the tick-carrier.

(4) Method of removal.

(5) The specific vaccine for Rocky Mountain Spotted Fever should be considered as a possible method of prophylaxis.

Those who by necessity work in tick-infected areas may find scores of ticks on themselves and their farm animals and pets. Proper method of removal of firmly attached ticks is important, for crushing the tick between the fingers may afford the rickettsia a portal of entry.

Ticks should be removed gently. This can often be done with the fingers alone. Touching the tick with a burning cigarette has been found effective. Care should be taken in removing ticks from pets.

After ingestion of the blood of a host the tick becomes swollen to several times its normal size. Blood-laden ticks fall from the host and are often found in homes where pets are kept. These ticks are highly infective and should be cautiously destroyed.

Small ulcers at the site of attachment of the tick may be cauterized with phenol or silver nitrate.

Clinical results at the Indiana University Medical Center with PABA indicate the effectiveness of this drug. It is felt that patients with Rocky Mountain Spotted Fever should be hospitalized in order that therapy can be regulated by the necessary laboratory studies.

(7) Summary

(1) Rocky Mountain Spotted Fever is endemic in Indiana. One hundred and ten cases have been reported in the ten-year period between 1937 and 1947. The mortality rate for Indiana was 29.2 percent for this period.

(2) The predominance of cases reported (84 percent) occur in the southern half of the state.

(3) The mortality rate at the Indiana University Medical Center before para-aminobenzoic acid therapy was 33 percent (eight deaths in 24 cases). In eight patients treated with PABA, 1 death occurred.

(4) In Indiana the disease is most prevalent in June, July and August.

(5) Any acute disease which begins with fever, chills, severe headache, pain in the bones and muscles, and a macular eruption which becomes petechial (after recent contact with ticks) should be strongly suspected of being Rocky Mountain Spotted Fever.

(6) We believe all cases of Rocky Mountain Spotted Fever should be judiciously treated with PABA. In addition, routine symptomatic care and antibiotic drugs are valuable adjuncts to prevent secondary infection in the debilitated patient.

(7) The specific vaccine for Rocky Mountain spotted Fever should be considered as a possible method of prophylaxis.

(Since this paper was written it has been brought to our attention, through the courtesy of Charles N. Combs, M.D., of Terre Haute, that a previous case of Rocky Mountain Spotted Fever was reported in 1925, by C. R. LaBier, M.D., of Terre Haute. It was reported in *The Journal of the Indiana State Medical Association* in November, 1925.)

THE TREATMENT OF DIABETIC COMA AT INDIANAPOLIS GENERAL HOSPITAL*

Franklin B. Peck, M.D.

INDIANAPOLIS

THROUGH the years since the discovery of insulin a dramatic change has been wrought in both the incidence and the mortality rates for diabetic coma in most of the larger clinics and centers of the United States. Rabinowitch[1] regards it as an inexcusable complication, which leads to death in only 1 in 1,000 cases at the Montreal General Hospital. Nevertheless, the overall picture leaves much to be desired. In municipal hospitals particularly, and in general practice outside the medical centers, the death rates continue to be far too high, as indicated by a survey in Cincinnati,[2] to cite only one example, which revealed 13½ percent of 183 deaths in one year to be caused by diabetic coma. The mortality rates differ widely in various hospitals, from 3 1/10 percent to 50 percent or more.[3] That the incidence of coma can be practically eliminated is shown by the Annual Reports of the Grace Hospital, Detroit,[4] where only one case has occurred in an active clinic over the five years 1941-1945, with one death.

It is fruitless to attempt to compare mortality statistics in various hospitals since it is obvious that they are dealing with entirely different segments of the population. The important point is whether or not the mortality rate in a given institution or clinic is being lowered through the years or whether it remains stationary at the high level. When a large proportion of cases entering a hospital in diabetic coma have their original diagnosis of diabetes made on that admission, one may be sure that diabetes is being missed in that community and the cases will be severe, with dangerous complications because of neglect; and, furthermore, that the gross mortality rate in that institution will be unusually high. This is exactly the situation in most municipal hospitals. The medical profession cannot be blamed for missing such cases if the patients have never consulted a doctor in the first place. Education of the public is what is needed, and this must be considered a medical responsibility.

It is not my purpose to present a statistical report but instead to outline the steps that have been taken at the Indianapolis General Hospital to meet the problem of treatment of severe complicated diabetic coma by the house staff. The matter was brought to a focus by a medical staff meeting in 1942, where it was pointed out that the mortality rate in ninety-four successive cases admitted with the diagnosis of diabetic coma between 1938-1942 had been 62 percent. Eighty-seven percent of the patients who were actually unconscious had died. That the present program is bearing fruit is demonstrated by the results in 1946, when out of sixteen cases meeting rigid requirements of classification, all having CO_2 combining powers of twenty or less, only three deaths occurred prior to recovery from the acidosis; one with cardiac failure and collapse in three hours, one within twelve hours (acute myocarditis and nephritis), and one having pyelonephrosis. A statistical analysis of the ten years experience will be made after 1948.

The Problem of Hospital Treatment

The problem of severe coma is one not susceptible to sporadic and haphazard attack. In a teaching institution the details of treatment must be carried out by the house staff and definite and precise methods must be formulated for the guidance of the intern under direct supervision of his resident. Rules must be laid down which can be followed through rotation of services, particularly when the visiting staff also changes periodically, if confusion, indecision, and inadequate therapy is to be avoided. Continuous effort must be directed toward maintenance of an efficient "team spirit" among the house staff, for only by methods designed to initiate treatment earlier and more vigorously can the end point of reversibility be extended sufficiently to lower mortality rates. Without enthusiasm on the part of one's residents not much can be done. Primarily the problem involves (1) earlier diagnosis and hospitalization; (2) immediate and adequate treatment on admission; (3) special measures to forestall and correct the shock-like state which supervenes and causes the death of the patient from circulatory collapse and anoxia.[3, 5, 6]

The term "diabetic coma" is unfortunate because occasionally consciousness is retained to the last,

* Presented before the Section on Medicine of the Indiana State Medical Association, at the annual session at French Lick, on October 29, 1947.

1. Rabinowitch, I. M.: Diabetic coma: evaluation and treatment; Proc. Am. Diabetes A., 6:195, 1946.
2. Facts about diabetes in Cincinnati, Cincinnati Acad. Med., January, 1941.
3. Joslin, E. P., Root, H. F., White, Priscilla, Marble A., and Bailey, C. C.: *Treatment of Diabetes Mellitus*, 8th ed., Lea & Febiger (Philadelphia), 1946, pp. 421-422.
4. Grace Hospital (Detroit) Annual Reports, fifty-third to fifty-seventh, 1941-1945.
5. Dillon, E. S., Riggs, H. E., and Dyer, W. W.: Cerebral lesions in uncomplicated fatal diabetic acidosis; Am. J. M. Sc., 192:360, 1936.
6. Kety, S. S., Polis, B. D., Nadler, C. S., and Schmidt, C. F., Philadelphia: Cerebral blood flow and metabolism in diabetic acidosis and coma; J. Clin. Invest., 26:1186, 1947.

TABLE 1.

Rabinowitch
Calculation of Severity Index
(File with History)

Factor	Rated	Rating 1	2	3	4	5
Age (years)		—15	16—30	31—50	51—70	71+
Duration of coma (hours)		—12	13—24	25—36	37—48	49+
Degree of unconsciousness		Drowsy	Semi-conscious	Unconscious but response to pain *	Completely unconscious	
Coffee ground vomitus				Present		
Infection				Present		
Blood Pressure (systolic)		89—80	79—70	69—60	59—50	49—
Plasma CO_2 combining power		19—16	15—12	11—8	7—4	3—
N.P.N. (mg. per 100 cc.)		41—60	61—80	81—100	101—130	130+
Associated conditions ‡		Very mild	Mild	Moderately severe	Severe	Very Severe
TOTAL						

Clinical Stage	*Severity Index*
Very mild	—5
Mild	6—10
Moderately severe	11—15
Severe	16—20
Very severe	21+

* Elicited by touching conjunctivae.
‡ Include only acute conditions capable of causing death independent of the coma. Briefly designate the complicating factor (e.g., pneumonia).

whereas more often it is lost when the degree of acidosis is less extreme. Usually an arbitrary value of 20 volumes percent for the CO_2 combining power of the plasma serves as a criterion for classification of cases. The usual causes are dietary imbalance, too little (or sudden withdrawal of) insulin, and infection.

Some of the ketones are excreted as free acid, other portions are neutralized by increased ammonia production, and by the buffer action of the blood by which carbon dioxide is displaced from the bicarbonate of the plasma. Fixed base, chiefly sodium, is lost when the ketosis is severe, and dehydration and hemoconcentration occur. Compensatory mechanisms are overwhelmed and several outstanding alterations from normal gradually appear: (1) the carbon dioxide combining power of the blood is reduced in proportion to the severity of the acidosis; (2) continued loss of fixed base entails a reduction in sodium chloride and electrolyte concentration, lowered alkali reserve, diuresis, and dehydration, accentuated by vomiting; (3) acetone and diacetic acid appear in the urine in large quantities; (4) hemoconcentration develops; (5) the pH of the blood shifts toward the acid side; (6) Kussmaul breathing, "air hunger," ensues, the blood pressure falls, followed by circulatory collapse, depression of renal activity, retention of nonprotein nitrogen in the blood, subnormal temperature, and finally, death.

There are two points of attack, both of which must be initiated simultaneously: (1) the acidosis, resulting from failure to utilize enough carbohydrate to prevent excessive production of ketones, and combatted by insulin; and (2) the ensuing anoxia and circulatory collapse, which so far responds only to measures designed to correct the intense dehydration, electrolyte imbalance, and oligemia. The sheet anchor of therapy in this phase has been and continues to be saline solution, although much study is now being given to modifications of intravenous fluids, particularly the inclusion of potassium,[7, 8, 9] and an improvement over normal saline solution may well be established in the near future.

Classification of Cases

In order to compare the results of any method of treatment in the same or in different clinics, some quantitative index is essential. The one devised by Rabinowitch, et al.[10] has been adopted and has been especially useful in guiding the intensity

7. Holler, J. W.: Potassium deficiency occurring during the treatment of diabetic acidosis, J.A.M.A., 131:1186, 1946.
8. Martin, H. E., and Wertman, M.: Serum potassium, magnesium, and calcium levels in diabetic acidosis; J. Clin. Invest., 26:217, 1947.
9. Nicholson, W. M., and Branning, W. S.: Potassium deficiency in diabetic acidosis; J.A.M.A., 134:1292, 1947.
10. Rabinowitch, I. M., Fowler, A. F., and Bensley, E. H.: An investigation of mortalities and report of severity index for comparative studies; Ann. Int. Med., 12:1403, 1939.

Chart 1

INDIANAPOLIS GENERAL HOSPITAL -
DIABETIC COMA RECORD SHEET
(Check every item each hour)

Name_____No._____
Adm. Rec. Ward_____a.m._____p.m.
First dose Insulin_____a.m._____p.m.
Fluids started_____a.m._____p.m.

DATE	HOUR	COMA			SKIN					RECTAL TEMP.	PULSE			BLOOD PRESSURE	RESP.				EYES		TONGUE		URINE					BLOOD					INSULIN UNITS			FLUID LITERS			OTHER TREATMENT
		Unconscious	Semi-conscious	Drowsy	Flush	Pallor	Cyanosis	Moist	Dry		Rate	Regular	Irregular		Rate	Acetone	Kussmaul	Cheyne-Stokes	Tension normal	Tension soft	Moist	Dry	Sugar	Acetone	Diacetic acid	Albumin-casts	Volume	Sugar	Plasma CO_2	NPN	WBC	Hematocrit	Ketones	Regular I.V.	Regular S.Q.	P.Z.I.	Saline	Glucose 5%	Lact.-Ringer's	

TOTALS	INSULIN	P.Z.I.	SALINE	GLUCOSE
1st 3 hrs				
1st 12 hrs.				

of treatment. It provides a concrete means of determining the necessity for larger doses of insulin, in addition to facilitating comparisons of one year's experience with another. Use of the Severity Index provides the intern and resident with a method of case grading which otherwise could never be obtained even after years of clinical experience. No case is included in the final classification unless, in addition to the usual clinical findings of drowsiness, vomiting, Kussmaul respirations, acetonuria, et cetera, the patient also has a CO_2 combining power of 20 volumes percent or less. The rigidity of this classification eliminates from our series almost half of the cases admitted with a preliminary working diagnosis of diabetic coma; cases which practically always recover and would tend to influence favorably the recovery rate. The Severity Index calculation is reproduced in Table I.

It is important that initial treatment *not be withheld* prior to calculation of the Severity Index, which is completed ordinarily within the first hour after admission.

The hourly coma record sheet is attached to the patient's chart on diagnosis immediately following admission and progress notes are filled in at hourly intervals (Chart I). This record is completed and summarized after recovery or termination of the acidosis. The main points for comparison from year to year are the totals of dosage of insulin, saline, and glucose. Experience thus far emphasizes the necessity of early large doses of insulin. If insulin dosage is not sufficient to lower the blood sugar level significantly in the third hour, the outcome is usually doubtful, and heroic dosage is indicated. A recent case, D.W., required 1,800 units during the first twelve hours before a blood sugar fall and rising CO_2 could be established. Subsequently this patient required 600 units per day for several weeks. Unless closely followed by laboratory estimations, or if glucose is given initially so that the response is obscured, the indications for massive doses may be missed completely.

Method of Treatment

The outline of minimum treatment routinely administered is given in Table II. One criticism of any standardized procedure for treatment of diabetic coma has been the necessity for individualizing insulin dosage and fluids. This is circumvented by the specific instruction to notify the resident and through him the staff member in charge of the service. By this time the essential information is at hand and necessary alterations may be made to fit any individual circumstance. As an example, occasionally a patient is admitted in coma whose blood sugar is found to be exceptionally low, 200-250 instead of 500 mg./100 cc. upwards. In such instances glucose can be administered at once with advantage and this change is made with only a special order.

TABLE II.

TREATMENT OF DIABETIC COMA (ADULT)

Diabetic coma is a first-rank medical EMERGENCY. It is primarily **ACUTE INSULIN DEFICIENCY**, which results secondarily in acidosis, dehydration, and later in PERIPHERAL CIRCULATORY FAILURE **(SHOCK).**

INSTRUCTIONS

A. Keep **complete hourly notes on coma record sheet.**

1. Draw blood for blood sugar, N.P.N., blood acetone, and CO_2; examine urine for sugar and diacetic acid. Notify Resident for stat E.K.G., and special studies.

2. **Immediately**—give 40 units insulin intravenously and 40 units subcutaneously, and start first 1,000 cc. normal saline intravenously. **DO NOT WAIT** to complete Severity Index calculation; make up the difference in Insulin dosage later (see below). GET GOING!!

3. Start intravenous saline without delay. Blood pressure must be over 90 mm. to prevent anuria. When systolic pressure is below 80 mm. Hg. use both arms.

4. Calculate Severity Index, and give balance of estimated Insulin and Protamine Zinc Insulin (do not repeat the latter). Notify chief of service and attending physician. Lavage stomach with sodium bicarbonate solution if **any** evidence of distension.

5. Take **blood sugars each hour** until first fall; then in 1 hour, 2 hours, 4 hours, 8 hours, and in 12 hours. Examine urine for sugar and diacetic acid every hour.

6. Repeat CO_2 and E.K.G. in 3 hours, 6 hours and 12 hours.

7. Determine blood acetone at time each blood sugar is taken. **Method**—To split-pea sized portions of the ketone reagent powder[11] drop on successive dilutions of blood serum in distilled water. The last dilution to give a positive reaction, when multiplied by 10, will give the blood-ketone level in mg./100 cc.

Example—

Dilution by Drops										
Drops of Serum	1	1	1	1	1	1	1	1	1	1
Drops of Water	0	1	2	3	4	5	6	7	8	9
Mix	⇓	⇓	⇓	⇓	⇓	⇓	⇓	⇓	⇓	⇓
	0	0	0	0	0	0	0	0	0	0
Keytone mg./100 cc.	10	20	30	40	50	60	70	80	90	100

B. INSULIN DOSAGE—BASED ON SEVERITY INDEX

Index	Reg. Insulin Intravenous	Reg. Insulin Subcutaneous	Protamine Z.I. Subcutaneous	Total
-5	40	40	40	120
6-10	60	60	60	180
11-15	80	80	80	240
16-20	120	120	80	320

Repeat subcutaneous doses* hourly until blood sugar is lowered to 200 mg/100 cc. **Insulin is given by its EFFECT.** After lowering occurs, subcutaneous dosage may be guided roughly by glycosuria, testing every one to four hours (depending upon progress):

BENEDICT TEST	4+	3+	2+	1+	0
INSULIN UNITS*	20	15	10	5	0

* If these doses are ineffective, double, treble, or quadruple them, if necessary.

C. SALINE

Saline is as important as insulin in the management of coma. Usually **at least 5,000 cc.** and **sometimes more** will be needed. A good rule is to give 1 liter of fluid per hour until the amount equals 10 percent of the body weight. Anuria may respond to hypertonic saline—50-150 cc. 10 percent saline, repeated if necessary.

D. GLUCOSE

Withhold glucose until the blood sugar falls to 200 mg. (or until the urine sugar has dropped to 1+ Benedict test). Then give 5 percent glucose, including with each 50 Gm. 1 ampoule of 'Betalin Complex' 2cc. As soon as possible, continue glucose by mouth, 100-200 cc. of orange juice (strained) or 20 percent Karo water every hour. Total glucose in first twenty-four hours may be 250-500 Gm. to replenish body stores to normal. Early glucose may precipitate hypopotassemia—watch E.K.G., respiration, and muscle coordination. Report any changes to Resident immediately.

E. ALKALI

Most cases do not need alkali. It should be **reserved** for those in profound ketosis with extreme hyperpnoea and with CO_2 combining power below 15 volumes percent.

In such instances sodium-r-lactate may be given intravenously in **one-half the amount calculated** to restore CO_2 combining power to a normal level.

Calculation of dose:

60—plasma CO_2 × (0.3 body weight in Kg.) = dose in cc. **molar** solution.

Give only **one-half** this amount intravenously **diluted five times** with sterile distilled water.

F CHECK YOUR TREATMENT AGAINST THIS LIST. **BE SURE NOTHING HAS BEEN OMITTED.** *DO NOT GIVE MORPHINE.*

G. **STAY WITH PATIENT**—or see him every hour until he is out of coma. Remember that usually coma is precipitated by some **COMPLICATION** (e.g., INFECTION); **LOOK FOR IT.**

* If these doses are ineffective, double, treble, or quadruple them, if necessary.

11. Dumm, R. M., and Shipley, R. A.: The simple estimation of blood ketones in diabetic acidosis; J. Lab. & Clin. Med., 31:1162, 1946.

A definite framework of treatment such as this has another advantage—it can be altered as frequently as desired, and the results can be studied from year to year. Thus, each year, some new procedure has been adapted; some have been retained, others have not, depending on their demonstrated value. One year all the severe cases with circulatory collapse were given blood plasma or transfusion. It was discontinued after a year as it did not result in any improvement in recovery rate over normal saline. Routine administration of oxygen has been continued through 1946 and 1947; in addition, during 1947 the severe cases received cytochrome C in a further attempt to combat vital tissue anoxia. This, too, has been discontinued. On account of the anoxia, no attempt is made to apply warmth to the patient in coma; it is preferable to keep him cool so that his oxygen demands are at a minimum until they can be met physiologically.

SUMMARY

From the time of admission and throughout treatment the essentials should be carried out speedily and diligently. Of prime importance are the administration of insulin, fluids, and electrolytes. Repeated systematic search should be made for complications, particularly infection, and specific treatment instituted promptly. Only by an organized and systematic attack by an enthusiastic team of co-workers can the mortality rate of diabetic coma be brought to the irreducible minimum, and even then the irreversible point may be pushed further and further back as promptness, efficiency, and experience are brought to bear on the problem.

FRACTURE OF THE SHAFT OF THE FEMUR

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FRACTURES of the femur can be grouped into those of intracapsular, intertrochanteric, shaft and supracondylar.

The intracapsular femoral fracture has many features which are specific to this level of the femur. It is a fracture which occurs almost always in the aged, the line of fracture is in the medullary bone, and thus healing takes place without the type of callus found in the shaft bone tissue. There is a shearing force in the fracture line on weight-bearing, accurate reduction and absolute and complete fixation are essential. There may be an associated circulatory disturbance which manifests itself only at a much later time in the way of aseptic necrosis of the head, and the laceration of the capsule may be extensive and its healing involve the joint function. The study of this type of fracture has been most exhaustive and many plans of treatment have been used and suggested. However, at the present time the treatment is more or less stable and the use of some metal device for fixation after reduction is orthodox. The three-flanged nail is the popular choice of device as its application is associated with but little shock to the patient and can, therefore, be used in the aged. External splintage is not necessary, the patient can have freedom of motion while in bed and also be out of bed, using crutches or a "walker" at an early date in the convalescence. The percentage of satisfactory healing is increased and that of the mortality rate decreased.

The intertrochanteric fracture of the femur also presents specific problems but a universal plan of treatment cannot be presented. Simple conservative treatment with some form of constant traction gives excellent results in the majority of cases. However, there is a trend to use some type of metal device, either the flanged nail or preferably the blade-plate, with the advantage that the patient has greater freedom of motion in bed and can become ambulatory at a very early time. Such radical treatment has the disadvantage of requiring an open operation and also some technical skill in the placement of the device. The experience with the Jones splint, based upon the principle of well leg center traction, has been very satisfactory. Although the mortality rate is too high in this fracture the prognosis for healing and return of function is excellent.

The supracondylar fracture, which so often is of the "T" type and thus involves the knee joint, can be treated either conservatively or in a more radical way, in which the fracture line is exposed or the fragment of the distal fragment transfixed with a pin. My experience has been most satisfactory with the use of the old-fashioned, double incline splint of Esmarch. This splint, which is of simple construction, easily applied, comfortable to the patient, and which gives traction with the knee in partial flexion, is not mentioned in some of the newer textbooks on fractures, but is well described by Stimson. Stimson's *Fractures and*

Dislocations should be available to every surgeon, in order that the conservative method of treatment of fractures may be learned, and that the trend of thought that every fracture needs a screw or a bolt or a wire or a nail or a plate or a band be curbed.

The fracture of the shaft of the femur per se is not a serious problem. With a plan of conservative treatment, in which a constant traction is maintained for a sufficient length of time for healing, alignment is obtained, and if sufficient end-to-end position is secured the fracture will heal without loss of length in the extremity or angulation in the line of fracture. The Russel balanced traction or skeletal traction is satisfactory for this purpose *providing a constant observation of the apparatus is maintained by the surgeon.* Many surgeons use the balanced traction, with a pin transfixing the crest of the tibia just below the tibial tubercle.

In the majority of cases in which there is a permanent impairment following a fracture of the shaft of the femur the impairment is due to loss of function in the knee joint. Therefore, any plan of treatment of this fracture should have as an essential feature the elimination of those factors which cause the knee joint impairment.

The textbooks and the medical student always define a fracture as "the loss of continuity of a bone or of a cartilage." In order to emphasize the seriousness of a fractured bone I propose the following definition: "A fracture of a bone is the pleasant dream of the student's slumber hour and the nightmare of the physician's working day." A fracture is not a problem of merely reducing the fracture and putting on a splint, nor is it a problem of a lesion of the bone alone. In every fracture, except the very minor, incomplete type, without displacement of the fragments there is also a tearing of the periosteum, a laceration of the adjacent muscles and an infiltration of the tissues with blood and serum. Whenever any tissue of the body is cut or lacerated scar tissue forms in the healing process. That laceration of the soft tissue about a fracture is not an exemption to this dictum of pathology. The serious impairment which results from a fracture in which healing is complete is usually that of the joint adjacent to the fracture line.

Some knowledge of the anatomy of the quadriceps muscle is essential in an understanding of the problem of the femoral shaft fracture.

The quadriceps muscle, as its name implies, is composed of four distinct muscle groups or bellies, with a common distal tendon attached directly to the patella and the capsule of the knee joint, and indirectly to the tibia through the patella and the patellar tendon for the function of extension of the leg upon the thigh through the knee joint. The middle anterior portion of the quadriceps (rectus femoris) arises from the anterior inferior spine of the ilium and from the brim of the acetabulum and is attached by a narrow, flat tendon to the patella. The lateral portion of the muscle group (vastus lateralis) arises through a broad aponeurosis attached to the intertrochanteric line, the borders of the greater trochanter, the lip of the gluteal tuberosity and the upper half of the linea aspera. This large muscle mass is attached at its distal end to the lateral border of the patella, blending with the tendon of the quadriceps femoris tendon and giving expansions to the capsule of the knee joint. The inner or medial portion of the quadriceps (vastus medialis) arises from the upper part of the femur and the tendons of the adductor muscles and the intermuscular septum, to be attached distally by its tendon to the lateral side of the patella, and it also has an expansion to the capsule of the knee joint. Lying beneath the rectus femoris is that portion of the quadriceps (vastus internus) which arises from the upper two-thirds of the shaft of the femur and from the lower portion of the intermuscular septum. Its fibers become a part of the deep part of the tendon of the rectus femoris. (This description is from Gray's *Anatomy.*)

From the anatomical construction of the quadriceps femoris muscle, and the relation of this muscle to the femur and to the knee joint, from the physiological phenomenon of the normal contraction of muscle tissue when unopposed, and from the pathological formation of scar tissue in lacerated tissue, arise the three factors which determine the loss of function in the knee joint. The healing process in the line of fracture of the shaft of the femur has but little if any part in the knee impairment.

There is also another factor in knee stiffness which must be recognized. Any tissue which has a special function, if put at rest and disuse, undergoes changes which lead to the formation of a low-grade, nonspecialized type of tissue. This is seen in the lung following artificial pneumothorax and in the testicle after vasectomy. In tuberculous lesions rest is the most important factor in the healing process and is based upon this premise of low-grade or scar tissue replacing normal specialized tissue put at rest or disuse. Any joint which is immobilized for a long period of time will be stiff due to these periarticular tissue changes. Such changes may account for a part of the loss of function in the knee joint which has been immobilized for a long period necessary for the healing of the fracture of the femur.

The anatomical study shows the close relationship of the quadriceps femoris muscle and the shaft of the femur and the capsule of the knee joint. Any condition which restricts the full function of this muscle will be reflected in a loss of function in the knee.

From the knowledge of the physiology of muscle tissue one observes that when the quadriceps is placed in a position of complete relaxation for a long period of time that the muscle mass contracts

Figure 1



Fractured Femur preoperative

Figure 2



Fractured Femur postoperative

and shortens, and also that periarticular changes occur about the knee joint to restrict its normal free motions. And from the pathological scar tissue in the quadriceps muscle, especially that portion represented by the vastus internus, which more or less wraps itself about the shaft of the femur, one derives the cause for the further loss of flexion of the knee. As this scar tissue binds the vastus internus directly and the rectus femoris indirectly to the femur it creates a point of anchorage so that that portion of the muscle distal to this point can have a range of motion equal only to the slack which occurs in this portion. It may be compared to a slack guy-rope which will allow a pole to bend only until the slack is taken up and the rope becomes taut through its point of fixation. Thus the flexion in the knee is limited to a very small range and extension may not be complete.

The physiological contraction of the muscle may be corrected by exercises and passive movements or by corrective wedged splints, and the stiffness about the knee from the periarticular changes may be eliminated through exercises in which these tissues pick up their specialized function, but the scar tissue and its associated adhesions respond only in part or not at all to such simple procedures.

It thus becomes a problem of preventing those factors which lead to the loss of function in the knee joint and which occur during the period of time required for the healing of the fracture of the femur. These factors can be controlled only if the physiological function of flexion of the knee is continued during this healing period in order to prevent the periarticular changes, the physiological contracture of the entire muscle mass, and especially to stretch and lengthen the scar tissue during its formative period. The physiological contraction of the muscle tissue can be prevented to a large degree by having the knee maintained in a position of partial flexion or by flexing the knee at frequent intervals during the day. This is possible if the pin for skeletal traction is placed in the lower end of the femur. The objection to this type of constant traction is that the bone may become infected through pressure necrosis and the periarticular tissue becomes involved. A full Plaster of Paris spica obviously prevents such movement in the knee joint.

The same mobilization of the knee joint is necessary to limit to the greatest degree possible the serious effects of the scar tissue during its formation. The passive movements of the knee joint should be supplemented by the active contraction of the quadriceps muscle group. The purpose of this discussion is to present the experience with a limited number of cases in which these objectives relative to maintaining function in the knee joint, without interfering with the normal healing in the fracture line, have been controlled by the use of double or two metal plates.

The use of metal in bone surgery dominates almost every plan of operative procedure in the treatment of fractures, and to a lesser degree that of joints. The presence of metal in or about a fracture line does not delay or change the healing processes, *providing* there does not exist or develop such pressure on the screws or the device, through strain and torsion in the fracture line

as to cause pressure necrosis and so loosen the fixation factor of the device to give rise to motion in the fracture site. The term "internal fixation" is a misleading one and this phase of any operation should be called "internal suture," as it is essential to have as efficient an external splintage in cases where an "internal fixation" device is used as if such device were not used.

In all definite and fixed opinions, as well as in definite and fixed rules, there are always exceptions. I am a "radical" against the promiscuous use of metal in fracture work, and as stated am of the opinion that efficient external splintage must supplement internal fixation. The exception to this opinion and to these rules is in the treatment of a fracture of the shaft of the femur, in that the most satisfactory plan is the use of two metal plates for immobilization and the after care is that of a Thomas splint with a Pierson attachment. But such exceptions are made not for the healing of the fracture but for the prevention of the stiffness and loss of function in the knee joint. A single plate on the shaft of the femur does not, for obvious mechanical reasons, give sufficient strength to the immobilization to permit action and passive motion in the knee.

The application or placing of the metal plates, one on the anterior and one on the external aspect of the shaft of the femur, is an operative procedure which does not need detailed description. The points to be emphasized are that the screws which hold the plate be long enough to transfix the cortical bone on the opposite side from the plate, and that the screws be "staggered" as far as possible. Inasmuch as there is postoperative bleeding which cannot be entirely controlled before closure of the wound, it is well to place a small subcutaneous drain of several strands of silk.

After this operation is completed, the leg is placed into a Thomas splint with a Pierson attachment to permit action and passive flexion of the knee. Inasmuch as only that degree of flexion in the knee can be obtained as equals the flexion of the thigh at the hip joint, it is necessary to suspend the Thomas splint with the hip flexed to forty-five degrees. To prevent any contraction deformity in the hip joint the Thomas splint can be lowered at night with the leg in full extension.

During the day the knee is flexed as far as possible by the patient operating the leg through a pulley arrangement. The after care is that of suspension of the extremity in a Thomas splint with a Pierson attachment. During the day the thigh is flexed at the hip to at least forty-five degrees. Through pulley arrangement the patient can then flex and extend the knee, maintaining that degree of motion equal to the flexion of the hip. After five or six days the passive motion in the knee can be supplemented by active contraction of the quadriceps. This maintains the tone of this muscle group to a considerable degree.

This method of double plating in shaft fractures has been used in twelve cases and the results have been so uniformly good that it is the method which I would want to have used should I be so unfortunate as to sustain this type of fracture.

The plan of treatment permits the patient greater freedom in sitting up or in being turned in bed. The splint is comfortable and the plates do not interfere in the healing process in the fracture line. The important factor is that the function of the knee is maintained to that degree that when the patient begins weight-bearing the knee can be flexed without pain to at least forty-five degrees and further gain in flexion is possible without the usual discomfort over a long period, which is so common when the knee joint has been immobilized for many weeks.

Illustrations show the fracture of each femur occurring in a young woman injured in an automobile accident. The convalescence was uneventful and the x-ray two years after operation showed solid union with but little, if any, reaction from the plates. This patient now walks without a limp, has a loss of only about ten degrees of flexion, is free of symptoms in the knee and in the femur, and leads the normal life of a person twenty years of age.

This discussion is principally directed to fresh fractures of the shaft of the femur. I have, however, used the double plates in old cases of malunion and in nonunion with bone grafts. However, in these cases the damage to the knee joint has already taken place and to restore function in the knee joint some type of tenoplasty of the quadriceps tendon becomes necessary.

BRUCELLOSIS*

A Resumé of Present Concepts

(with special reference to the chronic illness)

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BECAUSE it was requested that this talk include the bacteriology, pathology, symptomatology, diagnosis and treatment of brucellosis it is, of necessity, a resumé.

Classification of brucellosis as acute or chronic by dictionary standards is not as easy as it would seem. An illness may be designated "chronic" by one physician because it is long drawn out, although attended by high fever, whereas another would call it acute because of high fever, although of protracted duration. By chronic in this discussion is meant an illness of long duration attended by low-grade or no fever; by acute is meant an illness with high fever, whether or not it was preceded by a chronic phase. Perhaps "acute exacerbation of a chronic illness" would be more accurate under such circumstances.

BACTERIOLOGY

Brucella organisms are very small, nonacid fast, usually nonmotile and nonencapsulated, Gram-negative bacilli or coccobacilli which grow very poorly on ordinary media and usually develop very slowly when first isolated from the tissues.

Cultural characteristics of the three strains are similar except for varying CO_2 requirements. *Brucella melitensis* is aerobic always but some strains apparently are benefited by extra CO_2. *Brucella abortus* requires an atmosphere containing from 5 to 10 per cent CO_2 when freshly isolated from blood or other naturally occurring sources. *Brucella suis* is aerobic and may be inhibited by extra CO_2.

The three strains of *Brucella* have certain characteristics that usually allow distinction between them. However, it cannot be said that the species of *Brucella* isolated from a cow belongs to the bovine (*abortus*) variety, or that the organism isolated from a goat must belong to the caprine (*melitensis*) variety, nor that those recovered from a hog necessarily belong to the porcine (*suis*) variety, simply by virtue of their animal host. So many instances of cross-infection have been recorded as to leave no doubt that almost any susceptible animal may be infected by any of the three strains and may transmit that strain to man. For example, in Iowa swine were suspected by Jordan and Borts[1] of transmission of *melitensis* infection in 1945. Together with McNutt,[2] *Brucella melitensis* was isolated by them from tissues of 12 of 20 gilts soon after this report appeared. Huddleson was quoted by them as having observed this situation in Malta. *Suis* infections have long been known to be contracted by the cow and then to be passed on to man through milk, causing outbreaks of virulent *suis* infection. Apparently the hog is resistant to the *abortus* variety, however.

Under the microscope *Brucella* cannot be distinguished as to strain. The fact that *melitensis* strains are likely to be so coccoid as to have been first designated as *micrococci* by Bruce[3] is not a sufficient distinction, for *melitensis* strains are often bacillary and *abortus* strains are often very short rods resembling cocci. In the process of division they may resemble diplococci. *Suis* strains apparently always are rod shaped but may be very short (0.6 to 0.3 microns).

The technical means of identification of the three strains from each other are tedious and complicated. Morphologic and cultural characteristics, manner of growth, CO_2 requirements, formation of H_2S, cultivation in the presence of dyes, agglutinin absorption, cross-precipitation, all may have to be studied to arrive at a conclusion; usually production of H_2S, reaction with specific monovalent agglutinins and the bacteriostatic action of dyes (Huddleson)[4] are sufficient. The latter is the most useful of all methods but reliance may not be placed on it alone. *Abortus* strains grow only on medium containing fuchsin and are inhibited by thionin; *suis* strains grow only on the medium containing thionin and are inhibited by fuchsin; *melitensis* strains grow on media containing either fuchsin or thionin but less luxuriantly than do the other two species. In some cases differentiation with certainty is impossible.

Discussion of encapsulated Brucella[5, 6] and of mucoid phases[7] must be omitted although the significance of the former in production of disease and of the latter in the production of immunity may prove to be great.

PATHOLOGY

There is no characteristic pathology although some changes, particularly proliferation of the reticulo-endothelial cells, are seen often enough to seem significant. The same is true of granulomata

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resembling tubercle-formation. It was pointed out by Sprunt and McBryde[8] that the reaction of the host to *Brucella* infection may vary from a lesion which simulates tuberculosis to one of only slight stimulation of the endothelium system, or that there may be no discernible lesions. Forbus[9] stated that the reticulo-endothelial system is the primary reacting mechanism, the lesions belonging to the general group of infectious granulomata. Sharp[10] considered proliferation of the cells of the reticulo-endothelial system as "the most essential item in the general pathologic alteration," and that it may be sufficiently distinctive to help differentiate the disease from other conditions. Carpenter[11] also noted that the cellular reaction of the tissues of man and of experimental animals is typically granulomatous and particularly like that of the tubercle.

Smith[12] in 1919, Goodpasture and Anderson[13] in 1937, and Buddingh and Womack[14] in 1941 made observations on the localization of *Brucella* within tissue cells. Meyer [15] made similar observations on the intracellular position of *Brucella* in man in 1943; *Brucella suis* organisms were found within the parenchyma cells of the kidney. Castaneda[16] confirmed these findings and expressed agreement with the theory that the intracellular growth of *Brucella* may insure the preservation of the organism in spite of the state of immunity of the patient. Constant discharge of *Brucella* products into the system may result in hypersensitivity with systematic reaction, or may allow of recrudescence of focal or general infection. He considered that *Brucella* phagocytized by macrophages may be transported to all parts of the body and become the source of new colonies. The nodular formation could be explained as a reaction around wandering macrophages carrying *Brucella.*

The spleen shows the most definite changes. Gross enlargement and congestion were noted, with enlargement of malpighian bodies from increase in lymphoid cells. Scattered areas of necrosis have been noted by several. Rabson[17] and others reported granulomata of the spleen with increase in epithelioid cells, lymphocytes and giant cells, many of which were multilobulated, resembling enlarged megakaryocytes. Rothenberg[19] described nodules on the splenic surface resembling tubercles. Castaneda[16] considered the spleen to be the frequent site of *Brucella* localization because of the exceedingly rich material suitable for the intracellular growth of *Brucella.* Spink,[20] having removed the spleen of a patient with chronic brucellosis, with positive blood culture, was able to demonstrate typical granulomatous changes but was unable to isolate the organism from splenic tissue.

Pericarditis with isolation of *Brucella* has been reported by Hughes[18] and others.

Endocarditis primarily due to *Brucella* infection and other instances in which *Brucella* infection was grafted on rheumatic heart lesions have been reported by at least a dozen observers. In some cases it seems probable that *Brucella* septicemia was simply coexistent with acute or subacute bacterial endocarditis. Examples of true *Brucella* endocarditis were those reported by Spink and Nelson[21] in 1939 and by Spink, Titrud and Kabler[22] in 1942. The case reported by Smith and Curtis[23] in 1939 apparently was one of *Brucella* infection of valves scarred by an old valvulitis of rheumatic origin. The case reported to me by Hauswirth was one of coexistence of acute bacterial endocarditis and *Brucella* septicemia. Aortic or mitral valves were involved in the various cases, in ulcerative and vegetative processes.

Mycotic aneurysm of the left femoral artery was described by DeGowin, Carter and Borts[25] in 1945, occurring in a patient with proved *Brucella suis* endocarditis. *Brucella suis* was isolated also from the wall of the aneurysm, the rupture of which had caused death. Hansmann and Schenken[26] had reported rupture of an aneurysm involving the basilar artery in a patient with meningo-encephalitis of *suis* origin.

Thrombophlebitis associated with *Brucella* infection and apparently caused by it has been described by Cantini in 1914 (cited by Sharp),[10] by Wohlwill in 1934 (also cited by Sharp) and by Bagley, Mueller and Wells[27] who cited a report of Roger and Audier which stressed the venous localization of *Brucella melitensis* infection in the presence of septicemia. In the case of Bagley and his coworkers there occurred fatal pulmonary embolism from a thrombus in the left femoral vein in a patient suffering from acute brucellosis.

Respiratory tract pathology will be discussed more fully under symptomatology. Parsons and Poston[28] described two distinct lung lesions in a fatal case of brucellosis with extensive lymph node involvement — peribronchial and endobronchial. Large collections of polymorphonuclear leukocytes and inflammation of the endobronchial epithelium, and large collections of round and polymorphonuclear leukocytes in the peribronchial region were outstanding, with scattered areas of reticulo-endothelial proliferation.

Liver changes include enlargement, the granulomatous process noted elsewhere, sometimes with central necrosis, proliferation of fibrous tissue, striking hypertrophy of the Kupffer's cells, presence of giant cells and Dorothy Reed's cells and other less significant changes.[29, 30, 31] There is growing evidence that cirrhosis may occur.

Gallbladder pathology was described as chronic cholecystitis with patches of lymphocytes and plasma cell infiltration of the stroma and thickening of the serous layer, with fibrosis, by Hardy and his co-workers.[32] Eroded mucosa and diffuse

lymphocytic infiltration was noted by Mettier and Kerr,[31] and by DeGowin and his associates.[25] *Brucella* has been isolated from the gallbladder wall.

Gastrointestinal tract lesions, varying from simple congestion to ulceration of the small and large bowel have been found by Bruce[33] and others. Hemorrhage from ulcerating Peyer's patches was described by Levine and his associates.[34]

Pancreatic changes, with increase of fibrous tissue, infiltration with polymorphonuclear leukocytes and round cells, fat necrosis, and patches of degeneration have been noted by DeGowin and his co-workers,[25] Hardy and his associates,[32] and by Rothenberg.[19]

Renal changes were described by Forbus[9] as identical with the small focal granulomata found elsewhere. An extensive report was made by DeGowin and his co-workers[25] of diffuse nephritis in the presence of *Brucella* infection. Parsons and Poston[28] reported pathologic findings in the presence of positive culture of renal tissue.

Fallopian tubes are commonly the site of pathologic changes, but rarely described, apparently because of the widespread acceptance of the gonococcus as virtually the only infectious agent.[35] Amoss[36] reported coexistence of tubercle bacillus and *Brucella* infection in one instance. I[37] reported one case of salpingitis, with recovery of *Brucella* from uterine discharge in 1934; the clinical evidence of its frequent occurrence is far greater than pathologic reports have indicated.

Ovarian cysts due to *Brucella* infection were found by Amoss[36] and a few others. The pathology is not characteristic, recognition depending upon culture.

Testes as the site of pathologic changes have been discussed by Sharp,[10] by Parsons and Poston,[28] and by Rothenberg.[19] Clinically orchitis is a common finding, usually not causing destruction of the testes and therefore allowing very few histologic observations.

Placental changes were found in a case of repeated abortion which I[37] reported in 1934; there was gross necrosis in scattered areas in one placenta and fibrosis and macroscopic and microscopic calcification in another.

Lymph node changes, sometimes indistinguishable from Hodgkin's disease, were reported by Parsons and Poston.[28] Others [10, 25] have described granulomatous changes, with or without necrosis and hemorrhage, conforming in general to pathologic changes found elsewhere, particularly in the spleen. In one of my[24] patients with a clinical and blood picture strongly suggesting appendicitis, a mass of inflamed lymph nodes was the only pathologic finding; the positive blood agglutination reaction was not reported until after laparotomy.

Blood changes have been frequently described, most completely by Calder, Steen and Baker.[38] Leukopenia with relative lymphocytosis and anemia, normocytic or macrocytic, are usually but not constantly present.

Bone marrow lesions, with tubercle-like masses, identical with the small focal granulomata occurring in lymph nodes and spleen, have been described by Wohlwill[39] and by Forbus.[9]

Skin lesions ranging from fine macular eruptions to ulcerating lesions[40, 24] occur in brucellosis. Mettier and Kerr[31] reported on the biopsy of a maculopapular lesion which showed only vascular hyperemia, and slight perivascular infiltration of lymphocytes. In one of my patients granuloma-like changes were present.

Ocular pathology in the human is infrequently described because enucleation rarely becomes necessary. Fabyan was quoted by Woods and Guyton[41] as finding deep keratitis, lymphocytic infiltration and tubercles in the corneas of guinea pigs. In 15 cases of uveitis attributed to brucellosis by Woods and Guyton[41] the changes were simply the picture of recurrent iritis. In 3 patients there was nodular reaction in the iris, in one papilledema, in five generalized uveitis (producing phthisis bulbi in one). Nummular keratitis was described by Woods[42] as experimentally produced in rabbits inoculated with *Brucella*. Carpenter and Boak[43] noted lesions in the eye similar to those produced by the tubercle bacillus. In a review of the literature published in 1945 I[44] cited reports by Green[45] and various others of the following lesions: phlyctenular conjunctivitis, corneal ulcer, optic neuritis, retinochoroiditis, retinal hemorrhage, retinitis, iridochoroiditis, iridocyclitis, keratitis, papilledema, ocular muscle palsies, associated with or independent of *Brucella* meningitis or meningoencephalitis. I reported a case of recurrent iritis and death from encephalitic encephelomalacia in a sailor in 1943,[46] one of interstitial keratitis with response to specific vaccine therapy in 1945,[44] and one of chorioretinitis.

Central and peripheral nervous system involvement may be manifested as meningitis, encephalitis, myelitis or neuritis and has been described by Hansmann and Schenken[26] and others. In a complete autopsy report Hansmann and Schenken noted greyish-white "tubercles" on the leptomeninges of the anterior and central portions of both superior surfaces of the hemispheres, with thickening of pia and arachnoid due largely to infiltration with lymphocytes and plasma cells, moderate numbers of large mononuclear cells and connective tissue proliferation. The "tubercles" showed irregular masses of hyalinized connective tissue, moderately infiltrated with chronic inflammatory cells and in one area necrotic tissue. Meningeal vessels showed thickened adventitia, heavily infiltrated with inflammatory cells, with marked subintimal connective tissue proliferation in several of the brain stem vessels. The patient

had died of a ruptured mycotic aneurysm of the basilar artery.

Spinal fluid in central nervous system infection usually shows increased pressure, pleocytosis, increased albumin, and decreased chlorides and glucose. The fluid may be clear or cloudy or even frankly purulent. In the absence of definite central nervous system involvement Simpson[47] stated that cerebrospinal fluid may show a slight lymphocytosis and an increased sugar content, but in most cases no abnormalities.

Symptomatology

The acute febrile illness may be described as one of sudden or gradual onset, grippe-like in most instances, typhoid-like in others, of any degree of severity and of a few days to several months duration. In addition to fever, sweats, joint and muscle pain, and prostration, which make up the most common picture, any of the symptoms to be discussed under localized symptomatology may be present. Fever may be extreme. In one patient[48] a rectal temperature of 110° F. was recorded on two occasions by hospital attendants. There may or may not be splenomegaly or hepatomegaly.

The chronic illness usually is attended by fatigue, malaise, weakness, joint and muscle pains with low-grade fever or no fever. In addition there may be sweats, depression, irritability, loss of weight, anemia, arthralgia or arthritis, orchitis, salpingitis and a host of other manifestations too well known to need repetition.

In infancy and childhood the acute illness may resemble grippe, influenza, rheumatic fever or may be manifested by pyelitis, gastroenteritis, respiratory tract infection, atypical rashes, adenitis or by almost innumerable other symptoms. Central nervous system manifestations are not rare. Hagebusch and Frei[49] rendered a comprehensive report on childhood brucellosis, describing 182 cases, 6 of which were acute and 176 were chronic illnesses. Few abnormal physical findings characterized these cases. Evidence of congenital infection as well as infection from mother's milk was presented.

Localized Symptomatology

Respiratory tract manifestations [50, 51, 52, 53, 54] may include cough, bronchitis, hemoptysis, pleurisy, empyema, peribronchial infiltration, pneumonia or pulmonary abscess.

Pneumonia, bronchial, or lobar and other respiratory tract pathology due to *Brucella* or associated with it are not uncommon although rarely has *Brucella* been isolated from sputum as in the case reported by Eyre,[55] citing Fiorentini. One patient with a most diffuse bronchial pneumonia resembling carcinomatosis or miliary tuberculosis, with about 24 ounces of thin mucopurulent sputum daily, and one with the rather typical fan-shaped hilar infiltration were encountered on my wards in the naval service.

Cardiovascular manifestations may include bradycardia, myocarditis, pericarditis, endocarditis, mycotic aneurysm, endarteritis and thrombophlebitis.

Blood changes (leukopenia with relative lymphocytosis, normocytic or macrocytic anemia—rarely microcytic) have been mentioned. Eosinophilia,[38] usually low-grade, is of frequent occurrence. Elson and Ingelfinger[56] reported two cases of marked eosinophilia in the presence of pneumonitis and chronic brucellosis. In one, eosinophile counts of from 29 to 42 percent in the presence of leukocyte counts of 9,800 to 15,000 and in the other, eosinophilia from 27 to 40 percent in the presence of white cell counts of 16,600 or higher were noted. In one of my afebrile patients extreme eosinophilia was noted varying from 45 to 85 percent, with white counts ranging from 7,150 to 13,000; this patient had a long history of allergy of other origin which may have accounted for the eosinophilia. In a second young male, in a chronic phase following an acute *Brucella* infection, eosinophile counts ranging from 35 to 63 percent, with white counts from 12,800 to 24,000 were found, in the presence of low-grade fever. Blood agglutination reaction was positive in a 1:80 dilution; stool was reported as positive for *Brucella*. The chief complaint was weakness and fatigue. Periarteritis nodosa, diffuse vascular disease and eosinophilic leukemia were considered in the differential diagnosis; the latter was ruled out by relatively normal bone marrow study.

Sedimentation rates are usually within normal limits, even in the presence of moderate fever. High rates usually are noted in the presence of joint involvement, or other localized pathology.

Gastrointestinal manifestations may include constipation (less often diarrhea); abdominal distension often of marked degree; gastric and duodenal hemorrhage;[57] abdominal pain,[58] occasionally simulating appendicitis, and tenderness, often referable to retroperitoneal lymphadenitis. The not infrequent coexistence of peptic ulcer may be on an infectious or toxic basis, on a psychosomatic basis, or, as suggested by Carryer and Prickman,[59] simply due to ingestion of large amounts of milk in ulcer patients, perhaps with greater susceptibility to *Brucella* infection through the mucosal lesions.

Splenitis with splenomegaly, sometimes with acute pain, is encountered in perhaps 20 percent of the acute illnesses and in a much smaller proportion of the chronic cases.

Cholecystitis may be simulated by other abdominal complications of brucellosis or caused by actual infection of the gallbladder with *Brucella*, as proved by culture of aspirated bile and of the gallbladder wall after laparotomy. The gallbladder may be a persistent localization of infection.[60]

Hepatitis, as evidenced by enlargement and tenderness of the liver and liver dysfunction, is now recognized as of as frequent or more frequent occurrence than splenitis. Jaundice may occur, as in the patient of Chaikin and Schwimmer.[61] Cirrhosis may occur.

Urinary tract manifestations may include pyuria (sometimes resembling renal tuberculosis or pyelitis); cystitis, glycosuria, hematuria, albuminuria or nephritis.[24, 25] In one of my patients renal tuberculosis was so closely simulated that I repeatedly referred her to urologists who shared my expectancy that tubercle bacilli ultimately would be recovered. After 8 years of recurrent illness the patient asked me why I did not suspect brucellosis in her since I did the tests routinely in other patients of her acquaintance. She did have brucellosis and the urinary tract infection yielded completely to *Brucella* vaccine treatment. She has remained free of symptoms for 12 years.

Male generative tract manifestations may include epididymitis and orchitis (together or singly), vesiculitis and prostatic infection. *Brucella* was isolated from the prostatic fluid in one patient by Boyd.[62] Recurrence of orchitis was noted with each of several relapses of brucellosis in one of my patients. The prostate may be a more important focus of infection than can be proved, because of the difficulty in isolation of the organism.

Gynecologic manifestations include irregularity of menses or amenorrhea, salpingitis, oophoritis, ovarian cysts, sterility and abortion. Among 192 female patients between the ages of 18 and 45, *salpingitis* occurred in 24 (12.4 percent). Most cases were characterized by recurrent complaints of pain, tenderness, and systemic illness which accompanied the exacerbations, with no physical findings during spontaneous remissions. No cultural study in any large group of cases of salpingitis, to include search for *Brucella*, has ever been made. The only laboratory proof of *Brucella* salpingitis comes from isolated reports such as that of Amoss.[36] Kristensen reported isolation of *Brucella* from ovarian cysts as did Leavell[63] and his co-workers. In one of my patients[37] with recurrent salpingitis abortion occurred on three occasions; following the third abortion *Brucella* was isolated from uterine discharge. *Abortion*, with recovery of *Brucella*, has been reported by Carpenter and Boak,[64] by Frei,[65] by Witenstein,[66] by Menzani and De Zanche,[67] and by others. *Sterility* occurs in a significant number of patients.

Orthopedic manifestations may include arthralgia, hydrarthrosis, arthritis, (atrophic, hypertrophic and suppurative) spondylitis, myositis, myotendonitis, bursitis, osteomyelitis and degenerative, nonsuppurating bone lesions.

Arthritis of all types associated with and apparently due to brucellosis has been studied incompletely. That hydrathrosis may be caused by *Brucella* has been proved by culture of aspirated synovial fluid as reported by Simpson and Frazier,[68] by Sharpe[69] and by Baker.[70]

Other reports concerning true arthritic changes have been at variance as to their very occurrence, their frequency and types. Most articles refer to arthralgia rather than arthritis.[32, 74] That even rheumatoid arthritis of the Marie-Strűmpel type may be due to brucellosis seems probable from my experience with one severe case[71] and from observation and treatment of other cases of less severe degree. Goldfain's[72] report may give a false impression of the incidence of arthritis since "rheumatic, neuralgic and/or arthritic symptoms" and "clinical symptoms of neuralgic, muscular and/or arthritic symptoms," were included in the study. Green and Freyberg[73] studied 25 patients suffering from rheumatoid arthritis and 25 others with arthralgia, myalgia, hydrarthrosis, chronic inflammatory joint disease, periarthritis, et cetera; they concluded that arthralgia and other rheumatic symptoms are common in brucellosis and that *temporary* nonpurulent joint inflammation may occur. They thought that chronic nonpurulent joint inflammation is seldom, if ever, caused by *Brucella* infection. Response to therapeutic test of *Brucella* vaccine was not used as a criterion. In view of the paucity of specific diagnostic data in most cases of chronic brucellosis, omission of a critical evaluation of a therapeutic test of specific vaccine treatment may be vital to the accuracy of any study. The actual incidence of arthritis due to brucellosis probably lies somewhere between the very low incidence estimated by Green and Freyberg and the very high incidence gleaned from a casual reading of Goldfain's report. In a series of 427 patients whom I saw prior to October 1944,[74] about equally divided between rural and urban dwellers, there were 74 cases (17.3 percent) with atrophic or hypertrophic arthritis of varying severity. Evaluation was made on the basis of clinical study, blood agglutination reaction, intradermal reaction, opsonocytophagic test, culture, *and response to specific vaccine therapy.* It seems probable that when the same patients are seen over a period of many years, some of the so-called evanescent cases of hydrarthrosis, synovitis, or arthralgia of the acute illness may be followed, months to years later, by true joint changes.

Myositis, of bizarre distribution, is frequently seen in brucellosis, usually of moderate degree and often recurrent with exacerbations of systemic manifestations. O'Donoghue and Scott[75] reported degenerative myositis of supra- and infra-spinatus and deltoid muscles in a *Brucella melintensis* infection.

Myotendonitis affecting almost all parts of the body was described by Chuinard[76] and attributed to possible necrosis and lysis of tendonous inser-

tion of muscles, with occasional healing by calcification.

Bursitis affecting the subdeltoid bursa, with recovery of *Brucella melitensis* on aspiration, was reported by Kennedy[77] in 1904. Three instances of popliteal, two of subdeltoid, and one of prepatellar bursitis occurred among patients with brucellosis under my observation and were apparently attributable to it.

Of special interest is the role of very mild trauma in the production of localized symptomatology such as arthritis, periarthritis and myositis. Degenerative changes of the carpal bones followed very mild trauma in one of my patients.

Osteomyelitis has been reported by Hughes,[17] Simpson,[78] Kulowski,[79] Smith and Lowbeer[80] and others, involving skull, ribs, humerus, pelvis, carpal and other bones. I[24] reported one case of extensive osteomyelitis of both femurs which began in an 11 year old girl whom I have observed intermittently for 23 years.

Spondylitis is considered to be one of the most common skeletal localizations of *Brucella*. Destructive processes of intervertebral discs and vertebral bodies, usually in the lumbar region, occasionally with abscess formation simulating Pott's disease,[81] and spontaneous healing with bone spurs on the anterior surfaces of the vertebral bodies are the types usually seen.[82] Pain may be of gradual or acute onset and mild to extreme in degree.

Neuralgic and neuritic pain and true neuritis are of frequent occurrence. The sciatic neuritis may exactly simulate the classical herniated intervertebral disc syndrome and indeed may well be caused by infection of the disc with partial destruction, and nerve root pressure.

Central nervous system manifestations, including encephalitis, meningitis, myelitis or the combined picture, and encephalomalacia have been reported.[83, 84] The lower grade process of the meningitis, or meningoencephalitis, its tendency to relapse and the absence of any early neurologic findings characterized several of the cases in the literature and 2 cases among my patients. Poston and Thomason[85] described one case in a child. It is probable that this condition is sometimes diagnosed as tuberculosis, luetic, fungus or influenzal meningitis.

Neuropsychiatric complaints were found in 208 (44.3 percent) of the 462 reactors among 7,122 school children skin tested for evidence of *Brucella* infection by Angle and Algie.[86] Confusion, poor memory, inability to concentrate and depression are frequently encountered in chronic brucellosis.

Ocular manifestations have been mentioned under pathology. The usual situation encountered is choroiditis, iritis and iridocyclitis in the course of chronic brucellosis, according to Braley,[87] who stated that he was never able to isolate the organism. The lesions healed rapidly under vaccine therapy; they also healed with no treatment but required more time. In the literature there are many cases in which cultural proof from blood or spinal fluid left little room for doubt as to etiology. Uveitis and chorioretinitis were mentioned as common eye manifestations and neuroretinitis and external ocular muscle palsies as perhaps the only lesions by Krause.[88]

Ear, nose and throat manifestations may include sinusitis, epistaxis, pharyngitis, otitis media (acute or chronic), mastoiditis and nerve deafness. Nerve deafness with disturbance of both the cochlear and vestibular branches was attributed by Hirsh[89] to degenerative changes in the nerve ganglion apparatus due to circumscribed *Brucella* meningitis. Isolation of *Brucella abortus* from 8 of 56 pairs of tonsils surgically removed, reported by Carpenter and Boak[90] in 1932, suggests that the tonsils may serve as a focus of infection, perhaps determining ear and throat infections.

Skin manifestations may consist of contact dermatoses, various lesions perhaps of allergic origin occurring in the course of brucellosis, often recurrent with it, and ulcerative lesions proved by culture to be caused by *Brucella*. Lesions of various types occurred among 22 (8.9 percent) of the first 247 cases of brucellosis which came under my observation. Eleven types[24] were seen, from macular or maculopapular or circinate or crusting to a diffuse erythematous scarletiniform rash. Erysipelas-like lesions and others resembling erythema nodosa were the most striking. One case of seborrheic acne of 8 years duration in a 24 year old woman seemed to be so rapidly influenced by treatment of the concomitant brucellosis as to suggest an etiologic relationship. Others [91, 92] have described skin eruptions in 10 to 11 percent of cases.

Glandular system manifestation may include mastitis of the female[93] or the male[54] breast, thyrotoxicosis[24] (coincident with or caused by brucellosis), lymphadenitis, glycosuria, hyperglycemia[24] and other conditions referable to localized endocrine gland pathology.

Lymphadenitis is most likely to involve anterior cervical, axillary or inguinal nodes. When retroperitoneal nodes are involved other abdominal conditions such as appendicitis, cholecystitis or pelvic pathology may be closely simulated.[24]

Diagnosis

The clinical diagnosis of brucellosis, especially in its chronic form, usually only can be suspected pending laboratory study. High fever, prostration, profuse sweats, relatively slow pulse, arthralgia and myalgia, when prolonged beyond the stage when grippe usually terminates, is the usual syndrome which leads to exclusion of other likely causes, and finally to consideration of brucellosis. Any other symptoms, including evidence of central nervous system involvement, may be present. In the chronic illness there is less clinical evidence to

make the physician think of brucellosis early since the manifestations may be so protean. Physical findings are likely to be surprisingly few. Therefore diagnosis must depend upon a) very careful history of present and past illness, b) history of possible exposure, c) symptoms and signs, d) the multiple laboratory procedures, and e) sometimes upon therapeutic test of treatment.

Unfortunately two extremes of error frequently occur. Either the disease is not considered at all or its consideration leads to an early skin test, before adequate study including the other laboratory procedures are carried out. It is desirable to have brucellosis in mind as the possible cause of any obscure illness and to include it in the differential diagnosis from the beginning.

A positive history of exposure, as through ingestion of raw milk and cream, or direct contact with live cultures or with infected animals (including the horse), may strengthen the suspicion of brucellosis. A negative history seldom can be credited since almost everyone has had some form of exposure, even though unknown.

In applying the various laboratory procedures it is usually necessary to utilize them all; unless culture is known to be positive it is likely that all available data will be needed.

The blood agglutination reaction, next to culture, is the most reliable available evidence of active illness, when positive in high titer. The most frequent mistake in the diagnosis of brucellosis is to place reliance on a negative agglutination reaction. *The intradermal test should be deferred until all information obtainable from the agglutination test has been secured; otherwise, false agglutinins may be stimulated, as may opsonins.* In the acute illness a positive blood agglutination reaction may be expected within 2 or 3 weeks of the onset, in a majority of such cases, particularly of *melitensis* origin. In general a titer of 1:80 or higher may be considered adequate evidence of active infection, in the presence of symptoms suggesting brucellosis, and in the absence of laboratory and clinical evidence of other disease. Lesser titers should not be ignored. Occasionally, cross agglutination may occur in the presence of infection with *Eberthella typhosa, Proteus vulgaris X19, Pasteurella tularensis*, and more rarely in other infections, such as with the dysentery bacillus (Flexner). Recently evidence that infection with *Vibrio cholerae*[94] or prophylactic use of cholera vaccine may produce agglutinins against *Brucella* has been presented. Shaughnessy and Grubb[95] have submitted unconvincing evidence that persons with tuberculosis may show cross agglutination reactions with *Brucella*. Dooley[96] felt that fever of any origin may increase serum agglutinins against *Brucella* and this view was revived by Menefee and Poston.[97] The evidence submitted in this regard also was unconvincing.

When positive, with the exceptions noted above, the agglutination reaction is a reliable index of active or recently active *Brucella* infection. Agglutinins usually are very fleeting, even in the presence of long-continued infection, but may persist for months or years after clinical recovery.

In chronic brucellosis the blood agglutination reaction usually is negative, or if positive, usually in low titer only. Positive cultures have been obtained from blood, spinal fluid, or from tissue at laparotomy or necropsy in the absence of any agglutinins, even on repeated tests.

A microscopic blood agglutination reaction is useful qualitatively, and of value because of its rapidity and the requirement of little blood and a minimum of apparatus as a preliminary screening method before performing the usual macroscopic or tube method. Since the macroscopic method so usually does not show a high titer in infections of long standing, Lehr[98] considers that the microscopic method will confirm the clinical findings better than the macroscopic method.

The opsonocytophagic test, when carefully carried out, using virulent cultures of smooth strains of *Brucella*, is of value as an adjunct to other tests. Rarely is it noninformative or misleading when accurately performed. A few experienced workers, notably Simpson[58] and Spink and Hall,[99] place little confidence in the test, perhaps because of difficulty in laboratory technique. In my experience it has proved of great usefulness both in diagnosis and as a criterion of response to treatment. The usual application of the test is in conjunction with the intradermal test. A positive skin test and a phagocytic index showing anything from no phagocytic activity to moderate phagocytosis, in the presence of symptoms referable to brucellosis, strengthens the tentative diagnosis of brucellosis, suggesting an infection from which the patient has not recovered. A positive cutaneous test and a high phagocytic index suggests recovery from infection, but such a combination cannot be said to indicate immunity or cure, in the usual sense of the terms, for it has been found in continued active illness and in the presence of positive blood culture, and even in the moribund patient.

The test is simply a measure of specific resistance to *Brucella* infection and is confusing if considered as "positive" or "negative." A test designated as "negative" indicates only a very slight or no measurable degree of resistance. If the opsonocytophagic reaction shows from moderate to marked activity, it may be confusing to designate it as "positive" for the patient may be in process of recovery through vaccine therapy, or may have that high degree of resistance following complete clinical remission. Unlike the skin test, the agglutination reaction or culture, the opsonocytophagic test gives a quantitative rather than a qualitative result. The opsonocytophagic test must be per-

formed on blood freshly collected, preferably not over 3 hours old. Progressive diminution of phagocytosis usually occurs in older specimens. Although live smooth strains of *Brucella* are most satisfactory for performance of the test, parallel series of tests not under way suggest that organisms killed by phenyl mercuric borate (a technique suggested by Huddleson) may give reasonably accurate results.*

The blood complement fixation reaction is in need of re-evaluation. It has been largely discarded by most workers but there is some recent evidence that it may give information which may supplement that obtainable from the other laboratory procedures. Perfection of an antigen for the performance of the blood complement fixation test may be the main stumbling block to its more general use, according to Schmidt.[100] Wise and Craig[101] believe that the complement fixation reaction possesses no advantage over the more easily performed agglutination test but that it may occasionally be useful for the diagnosis of acute brucellosis because complement fixing antibodies frequently appear before agglutinins. Menefee and Poston[97] stated that it offers no advantage over the more simply performed agglutination test. On the other hand, Griggs[102] believes that the test has some confirmatory value.

The intradermal test gives evidence of present or past infection with *Brucella* but does not distinguish between them. A negative intradermal reaction, while very much against infection ever having existed, cannot be used to exclude brucellosis altogether since it has been shown to be negative even in the presence of positive cultures. Intradermal reactions are less likely to be positive in children.

Brucellergen is perhaps the most commonly used skin testing antigen. In my experience, in performing intradermal tests both with brucellergen and with heat-killed *Brucella abortus* vaccine, in the same patients, simultaneously, in opposite arms, positive reactions are obtained in approximately twice as many patients with heat-killed vaccine as compared with Brucellergen, thus tending to confirm the observations of Angle, Algie, Baumgartner and Lunsford.[103] Rather violent cutaneous reactions, with lymphangitis, regional lymphadenitis, febrile systemic reactions and even slough at the site of the intradermal inoculation with heat-killed organisms occasionally occur. However, these disadvantages seem more than offset by the greater sensitivity of the antigen. Use of the *abortus* strain alone renders violent intracutaneous reaction less likely than when mixed strains of *Brucella* are incorporated in the skin testing agent.

The cutaneous reaction to Brucellergen is read preferably at the end of 24 and 48 hours. When using heat-killed *Brucella abortus* organisms the test is best read at the end of 4 days and again at the end of 7 days, because of possible delayed reaction.*

The technique of the intradermal test is similar to that of the intradermal tuberculin test. It is essential that the injection be made in the very superficial layers of the epidermis, producing a wheal. Weakly positive reactions may not be ignored. Usually the degree of intracutaneous reaction is a direct measure of the patient's sensitivity to *Brucella* antigen and serves as a valuable guide to the proper dilution of vaccine to be employed in treatment, in the majority of instances. Use of syringes which have ever been used for the performance of the tuberculin test, and which may therefore contain traces of the purified protein derivative of the tubercle bacillus, should be avoided because of possible false reactions.

Culture, when positive, is the one definitive test for brucellosis. Negative cultural findings may not be considered of diagnostic significance because of the difficulty in isolating the organism, especially in the chronic phase of the illness. In acute *melitensis* infection the organism is usually recoverable. *Brucella suis* also is relatively easy of cultivation. *Brucella abortus* grows with the greatest difficulty. *Although the likelihood of culturing Brucella in the chronic illness is exceedingly slight, meticulous technique and use of the special methods and media essential for the isolation of Brucella may be rewarded.* Poston[104] reported isolation of *Brucella* from 5 patients with chronic brucellosis among 14 studied; all other tests had been negative or noninformative. Special culture media and an atmosphere containing 5 to 10 percent CO_2 is essential for recovery of most *abortus* strains. Subculturing every 3 days for 6 weeks is an important step in cultural study. Inoculation of guinea pigs may be the only method of recovery of the organism.

Differential Diagnosis

Because brucellosis is known to be as protean in its manifestations as tuberculosis or syphilis it can resemble virtually any disease entity or syndrome. Therefore, a full discussion of differential diagnosis would encompass the space of a system of medicine. Only a few examples will be discussed by way of illustration.

In the acute illness the diseases most likely to be confused with brucellosis are grippe, influenza, rheumatic fever, malaria, acute tuberculosis, pneu-

* Various studies were aided by a grant from the Committee on Scientific Research of the American Medical Association.

* Since this paper was read observations on the use of bacterial antigen complexes prepared from each of the three species of *Brucella* according to the method of Hoffman have been made. There is some evidence that these chemically precipitated antigens may be species-specific when used intracutaneously.

monia, pyelitis of other origin, typhoid and paratyphoid fever, acute or subacute bacterial endocarditis, infectious mononucleosis, meningitis of other origin (influenzal, tuberculous luetic, virus, or torula) and various of the tropical and subtropical diseases now coming into greater prominence in America since the recent war.

In the chronic illness, the need for differential diagnosis from an even greater variety of diseases and syndromes is obvious. Perhaps the most difficult of all of the differential diagnostic problems in chronic brucellosis is that from psychoneurosis. They may coexist, making it essential to assess the relative importance of each component. *Psychiatric examination, aided by use of the Rorschach test and other psychologic study, often is of great value if carried out expertly in conjunction with other clinical and laboratory studies.*[105].

The occasional occurrence of false positive Kahn tests in brucellosis, rarely referred to in the literature, deserves mention.[106]

Chronic malaria is seldom considered in the differential diagnosis of brucellosis; it may be extremely difficult. Most and Hayman[107] stated that occasional protracted low-grade malarial activity in some individuals with good immunity may be manifested by slight to moderate anemia, and enlargement of the liver and/or spleen, and that inadequate treatment of a frequently occurring mild attack may also produce the same finding. Fever may be low-grade or absent. Although parasites are almost always present in the circulating blood, their density may be very low. Except in the hands of the expert, malarial parasites may not be found, especially when few in number.

The differential diagnosis of the other conditions mentioned throughout the article is suggested by the illness itself. Coexistence of other illness, such as tuberculosis and brucellosis, is not rare. Obscure malignant diseases may be very difficult of differentiation.

Treatment

Probably the greatest single obstacle to the complete eradication of the organism, and therefore to the cure of infection, is its tendency to live on in inaccessible foci. The spleen, gallbladder, oviducts, prostate, retroperitoneal or other lymph nodes, and other granulomatous tissues may harbor the organisms, where it may resist treatment by any known means. The intracellular localization and multiplication of *Brucella*, as discussed by Meyer[15] and by Castaneda[16] and others may furnish the explanation of the difficulty of achieving cure. The surgical removal of infected fallopian tubes or gallbladder may not result in cure, because of other localization of infection. Splenectomy has not yet been fully evaluated but may be an effective method in patients in whom splenic localization of infection has been demonstrated.

The conservative treatment of accessible localized infections such as that in oviducts is successful in a large percentage of cases, with meticulous technique. Pelvic short wave diathermy,[24] using temperatures near the upper limit of tolerance and safety, by means of the Bierman or Gottesman vaginal electrode, usually is effective in bringing about resolution, along with treatment of the systemic infection. Roentgen irradiation of the spleen may prove to be of value.

Chemotherapy has been employed in almost limitless combinations. The sulfonamide compounds, (sulfanilamide, azosulfamide, sulfamerazine, sulfathiazole and sulfadiazine) usually are helpful in tiding the patient over the acute illness. Relapse may not occur. Occasionally they may be effective in the chronic illness, especially in the presence of involvement of joints. In the treatment of the acute illness, it is important to overlap the administration of the sulfonamide compound with vaccine therapy, as soon as the acute phase is terminated, unless a high phagocytic response has been achieved and is maintained.

Antibiotics have proved disappointing in the treatment of acute or chronic brucellosis, with exceptions to be noted. Penicillin gives no promise of curative or even palliative effect, in my experience and that of others.[108, 109, 111] Streptomycin apparently is effective in terminating the acute illness with resultant negative cultures, but relapse usually follows.[99] In one patient rapid improvement followed the use of streptomycin but relapse followed each of two courses of this antibiotic. A decided phagocytic response followed its use, but was temporary. Splenectomy was performed with a course of streptomycin preceding and following operation and the patient has remained free of symptoms for 10 months. Herrell and Nichols[110] found streptomycin to be of value only in terminating the acute illness except in one patient in whom apparent clinical cure resulted when splenectomy followed a third course of streptomycin; relapses had followed the previous two courses of streptomycin.

An intensive effort to treat acute and chronic brucellosis with streptomycin was made at Halloran General Hospital,[112] Staten Island, New York. Seven patients were in the acute phase and ten in the chronic phase. Blood cultures were positive for *Brucella* in 6 of the 7 acute cases and in 1 of the 10 chronic cases. Although inadequate dosage was used in some, there was no convincing evidence of value of streptomycin in any patient, even with large and prolonged dosage. *However, in two acutely ill patients treated with streptomycin and sulfadiazine combined there was prompt response with clinical arrest of the disease.* Dosage used was 4 grams of streptomycin daily and from 4 to 6 grams of sulfadiazine, concomitantly, over a period of 21 days. The toxic effect on the eighth cranial

nerve must be considered in deciding upon the justification for use of streptomycin.*

Brucellin, a filtrate of the three strains of *Brucella*, when used in accordance with the usually prescribed regime,[4] is productive of severe focal and systemic reactions. In the chronic illness Huddleson[4] has stated that Brucellin would bring about response in about 25 percent of cases, if used for at least 6 months, at first at 3-day intervals and later at 15-day intervals.

Antiserum proved effective in the hands of Foshay[113] and others in terminating the acute illness of less than 4 months duration. Unfortunately it is no longer available. A polyvalent antiserum, made commercially by Sharp & Dohme, was reported upon favorably in eight cases by Flippin.[114]

Transfusion of immune blood has met with varying degrees of success. In an acute illness of extreme severity transfusion of 500 cc. of citrated whole blood was given by a patient whose phagocytic index had remained at a high level for more than 2 years following apparent recovery from chronic brucellosis. There was prompt improvement in the recipient and a significant rise in the phagocytic power of the white cells. Creswell and Wallace[115] reported favorable effect from transfusion of immune blood.

Artificial fever therapy seems to be of particular value in hastening recovery from *Brucella* spondylitis and it has its advocates in other forms of brucellosis. It may be induced by the fever cabinet or by intravenous typhoid for routine use. I am opposed to the latter method because of the possibility of uncontrollable febrile reaction. Simpson[58] advised the use of the fever cabinet in cases which prove refractory to vaccine therapy, giving 6 sessions of 3 hours duration, at rectal temperature levels of 105° F. during a period of 2 weeks; Phalen, Prickman and Krusen[116] gave 3 sessions with sustained rectal temperatures of 105 to 106° F. for 5 hours, at 3 day intervals.

Brucella antigens still seem to be the most effective method of treatment of the chronic illness. Occasionally they may be used, with caution, in the acute illness. Foshay's detoxified (nitrous acid treated) vaccine often may be used in suitable dilutions in the acute phase.

My preference has been for heat-killed *Brucella abortus* organisms.* Local and systemic reactions are less than when vaccines are employed embodying the mixed strains of *abortus* and *suis*, or *abortus* and *melitensis*. Clinical and serologic response seems to be greater, a view shared by Foshay[113] and Calder,[117] even in the presence of *suis* and *melitensis* infections. However, Simpson[58] has reported excellent results from mixed strains (*abortus* and *suis*) in dosage sufficient to cause 4 to 6 sharp systemic febrile reactions, avoiding only extreme local reaction or general malaise. He advised against the use of the *melitensis* strain except in the presence of *melitensis* infection. Foshay[113] agreed that the use of *melitensis* strains should be restricted to patients infected with those strains, in order to avoid a state of refractoriness which often follows its use. Calder[117] expressed preference for the *abortus* strain alone even in the presence of *melitensis* infection, pointing to a secondary drop in opsonic activity if the *melitensis* strain is incorporated in vaccine.

Technique employed seems of great importance. Use of the intramuscular route rather than subcutaneous administration seems more likely to avoid local reaction and also to bring about desensitization and phagocytic response more effectively. *Of special importance is the use of a sufficient dilution to avoid more than very mild local, focal and general reaction.* In the presence of central nervous system involvement or ocular involvement, focal reaction conceivably could be deleterious by production of irreversible changes. The standard concentration of *Brucella abortus* vaccine usually is 2,000 million organisms per cc. Dilutions of 1:10, 1:100, 1:1,000, 1:10,000 and rarely greater, are necessary for the treatment of patients with varying degrees of sensitivity. (Moss[118] has stated that sensitivity may be increased by use of too great dilutions. Using the technique of Foshay, Moss reported excellent results in over 90 percent of 74 cases of chronic brucellosis.)[119] When properly employed there is usually a parallel between lessening sensitivity, increasing phagocytic power of the white cells and clinical response. Repetition of previous dosage or use of a greater dilution is advisable whenever an unexpected reaction occurs. Pro-

* Since presentation of this paper, various other observations on the concomitant use of streptomycin and sulfadiazine have been made. Pulaski, in a personal communication, reported recovery in 6 of 7 patients treated with 3 grams of streptomycin and 6 grams of sulfadiazine daily for an average of 21 days; two patients relapsed at the end of the seventh and twelfth week, respectively. Eisele and McCullough (Eisele, C. Wesley; McCullough, Norman B.: Combined Streptomycin and Sulfadiazine Treatment in Brucellosis, J.A.M.A. 135,16:1053-1055, Dec. 20, 1947) and Spink and his co-workers (Spink, W. W.; Hall, W. H.; Shaffer, J. M. and Braude, A. I.: Human Brucellosis. Its Specific Treatment with a Combination of Streptomycin and Sulfadiazine, J.A.M.A. 136,6: 382-388, Feb. 7, 1948) also have reported successful treatment of the acute illness by these methods. The first known case of successful treatment of a chronic brucellosis, due to *Brucella suis*, was reported by Harris and Jett (Harris, H. J. and Jett, P. C., J.A.M.A., to be published); this patient received 4 grams of streptomycin and 6 grams of sulfadiazine daily, with decreasing amounts of streptomycin after the fifth day, for a total of 19 days, and has remained well for 7 months.

* Brucella abortus bacterin (heat-killed) Bio. No. 4713, Sharp & Dohme, has been substituted for a similar preparation made by the Division of Laboratories and Research, New York State Department of Health.

duction of sterile cyst-like nodular reactions at the site of inoculation should be avoided by proper dilution of the vaccine and by intramuscular injection. Interval between dosage may vary from 4 to 7 days.

A course of vaccine comprises whatever number of doses of appropriate dilution that may be needed to bring about clinical and serological response of lasting degree. Continuous or intermittent dosage may be necessary. In one extreme instance vaccine has been used intermittently for a period of 14 years. Whenever it is left off for more than a few months unmistakable evidence of recurrence of active infection has ensued. In some patients a half-dozen doses may be adequate. Children usually respond rapidly and with lasting recovery.

Intradermal administration of vaccine may stimulate opsonic and clinical response more rapidly than by other routes in some instances. Occasionally there is rapid clinical and serologic improvement following the initial intradermal test dose of vaccine as to preclude the necessity for therapeutic doses of vaccine. Routine use of the intradermal route has been reported by Urschel,[120] with good response.

The intravenous route of administering the vaccine, beginning with the highest dilution, is indicated in patients in whom desensitization and phagocytic response is unsatisfactory. Reactions may be sharp, with chill and fever. A usual course of intravenous injections consists of 5 doses.

Contraindications to the intravenous route are ocular or central nervous system involvement. There are few contraindications to the employment of proper dilutions of the vaccine by the intramuscular route in the chronic illness, since reactions are largely controllable.

Castaneda,[121, 122] working with infections mainly of the goat variety, in Mexico City, has developed a vaccine designated as M.B.P., composed of a solution of the bacterial bodies of all three strains of *Brucella.* It is intended to cause only mild or no reaction and to desensitize as well as to increase immunologic resources. He reported excellent results even in gravely ill patients. I have employed this vaccine in 25 patients in the past 4 months, with satisfactory early response in the majority.

Results of vaccine therapy* need much more careful evaluation over a long period of time than ordinarily is possible. If reports are rendered after only a few months or perhaps a year of observation, recurrences will not have been noted and unduly optimistic results recorded.

A rational diet, for liver protection as well as nutritive value, is one containing high percentage of protein and carbohydrates and low in fat. This may be supplemented with parenterally given crude liver extract and mixed vitamins when indicated. Use of the vitamin B complex and ascorbic acid routinely may be of value in bolstering phagocytic response.

Comment

An attempt has been made to summarize current concepts of various phases of *Brucella* infection. Much that is important has been omitted. It is hoped that the bibliography will serve as a partial guide to the literature on special phases. Brucellosis is a common disease that is slowly becoming appreciated in its true light. Diagnosis and treatment may be difficult but the many problems usually can be solved.*

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* Since delivery of this paper bacterial antigen complexes made from each of the three species of *Brucella,* according to the method of Hoffman, have been used in 98 patients suffering from chronic brucellosis. Desensitization and immune response, even in the presence of hypersensitivity, have been evident in a majority; further observations are being made. (This work has been aided by a grant from the Lilly Research Laboratories.)

* A bibliography of 122 references accompanied this manuscript, any one of which, or the complete list may be obtained from THE JOURNAL or the author.

DR. R. L. SENSENSICH WILL BECOME PRESIDENT OF A.M.A.

The American Medical Association meeting opening in Chicago Monday, June 21, will be of special interest to Indiana physicians because one of their fellow practitioners, Dr. R. L. Sensensich of South Bend, will be elevated to the presidency. The A.M.A. session is expected to attract a large number of Hoosier doctors. Also of special interest will be a program for county medical society officers, at the Palmer House on Sunday, June 20, over which Dr. A. M. Mitchell of Terre Haute will preside. The conference is open to all physicians.

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THE JOURNAL'S PLATFORM

1. **Preservation of American Medicine through voluntary service to the sick.**
2. **Advocating full-time county or district health officers, locally appointed.**
3. **Restoration and preservation of our natural waters and resources.**
4. **Maintain the present high standard of the Indiana University Medical Center, combining the full medical course in Indianapolis.**
5. **Elimination of diphtheria and smallpox through immunization and vaccination.**
6. **Support of the state-wide campaign against undulant fever.**

Editorials

LETTER TO A MEDICAL STUDENT FROM HIS PHYSICIAN FATHER

(Editor's Note: The following letter, written thirty-five years ago on the occasion of the twenty-first birthday of the recipient, was found recently among some old papers, and seems worthy of reproduction here.)

My dear Son:

It is scarcely necessary to remind you that yesterday was your twenty-first birthday. Neither did I need a reminder of it as it has been much in my mind of late, and a flood of ideas and impressions came rushing through on account of it. Your Mama and I have discussed it much of late because it marks an epoch in our lives no less than in your own. To us it means that two-thirds of our lives are in the past and only an uncertain one-third is still before us. We have now started on the last leg of the triangular journey, and having a downgrade speed will be rapid. The first leg of our journey was not unlike your own except in details. It was a period of preparation, made up of school and college work, full of sunshine and happiness, without serious responsibilities, and in it were born the ideals and around us operated the influences which have made us what we are.

The second period, ended for us and now opening to you, was one of application, which spells hard work. It has been filled with blessings, the greatest to me being the entrance into my life of Mama, you and your brother, with many disappointments and failures, and with some, not many, successes. Possibly the application and hard work may bring forth a harvest in the next period. I hope so, but do not know. The richest reward which possibly can come to us and which we hope and pray for is your eminent success, equalled only by your younger brother. We ask for nothing better and sweeter, and no kinder and gentler solace for our declining years.

You have now arrived at the day when the customs of our fathers and the law of the land

proclaim you a *man*. With your feet upon the ground and your head raised higher than ever before, the horizon of your vision is broadened into your best view of the world and mankind. If you pause long enough to consider it, you cannot fail to see a call to your duty with opportunity all about you. You will see much to be done in every direction. The busy period of your life, I predict, will include the greatest movement in the uplift of mankind which the world has ever known. There is a part in it for you, a duty which the noble profession which you have chosen will peculiarly fit you to do. Will you do it? I believe you will.

Do not, I beg you, believe that success in your work can be measured by the dollars you may accumulate. They are worth-while, to be sure, but as nothing to duty well done to yourself and humanity.

Your work of preparation must continue yet a little while, and I hope you may now see better than ever before in this new and broadened vision the value of thorough preparation, and how idle all things else are. And remember, too, that the big things of this life are done by the few, and that the majority does not succeed. Your ideals cannot be too high, but keep them clean and pure.

In this second period I am permitted no longer, nor would I if I could, to say *must* or *shall* to you, but am bidden to substitute *should* and *ought* to, which by interpretation means that you are a man and therefore can see your own duty; and my relation is that of adviser or counsellor, to point out that duty should you perchance fail to see it, and this will be my privilege and pleasure as long as life is left me. If everything else fails you, you can confidently depend upon me to back you up, and assist you.

The day, twenty-one years ago, is indelibly fixed in my memory. Its details are as clear as those of yesterday. With what joys we welcomed you! What hopes were born in our hearts for you! I felt then, as I feel now, that your mother was the sweetest and dearest woman in all the world, and that the Star of Bethlehem only had shown on a more precious babe. You grew in time into a dear child, a splendid youth, and now respected manhood, to be noble and trusted and honored by your fellows. Your development has not been without anxieties to us, and I may add some trials which you know not, but you have justified them. You have been dutiful and respectful and have brought us no heartaches, for all of which we are grateful and commend you most heartily. We are proud of you.

Our hopes and ambitions for you have grown with your years, and you would blush were I to recount them to you. Go on with your work of preparation and let your angle of vision grow broader and deeper, that you may know mankind and see the things to be done.

At this time, and in closing, I have only one thought to leave with you, and it is wrapped up in the one word, *duty*. It is the biggest word in the vocabulary of our language. Keep it with you. Duty to yourself, to humanity, and to your God. It covers the whole ground.

With love and every blessing,
Your devoted Father.

A BOOST FOR THE COUNTY MEDICAL SOCIETY

IT is reported that some years ago, when Queen Marie, of Romania, was paying a visit to this country, she stopped in an eastern city to attend a reception. The wife of the community mayor was among those present and, in conversation with the Queen, the latter gave voice to an opinion that was highly pleasing to the First Lady. She is quoted as responding, "Queen, you said a mouthful."

We are reminded of this incident on reading a statement by Dr. Louis Bauer, President of the Medical Society of the State of New York, also a member of the Board of Trustees of the American Medical Association. He is quoted as having said "The county medical society in many areas has become just another society."

Later he said "*Medicine has become overorganized.*" So many special societies have been brought into being that the lowly county society, *in our opinion the most important of all these groups*, is being given the "run-around."

The average physician finds it possible to attend just about so many medical meetings each month, what with the staff meetings at the hospitals. Many physicians are members of several hospital staffs, at which regular attendance is a requirement.

This means that some societies will suffer a loss in attendance and interest—usually the "lowly" county society. Dr. Bauer most aptly says, "Today the influence of the county medical society is needed more than ever before. The individual physicians must be kept united and informed; the public must be educated as to the problems of medicine, both scientific and economic. Contacts must be maintained with lay groups and organizations within the county."

Dr. Bauer then goes on to say that the county society has a responsibility to the public, as well as to its members and to medical organization in general.

We have felt for some time that we have too many medical organizations, that is, too many special societies. Dr. Jones, having prepared a paper on some important subject, is too prone to ignore the local county society and seek an appearance before some "Brass Hat" organization. This happens all too often, in our opinion.

As we often have remarked, if there were no county medical societies, there just wouldn't be *any* organized medicine. These little groups, spread all over the nation, are veritably the "grass roots" of medicine.

So it is that we welcome the Third National Conference of County Medical Society Officers, to be held in Chicago at the time of the American Medical Association, in June. It means that after a long, long period of lean years, the little county organization finally is recognized for what it really is, the backbone of American Medicine.

RESIDENCY TRAINING FOR GENERAL PRACTICE

THE University of Michigan Medical School has established in its University Hospital a new type of residency, designed especially for the extended graduate training of doctors for the general practice of medicine.

The training program as now constituted provides an internship of twelve months, to be followed by a year of residency, and an optional third year. The services through which the intern and general resident rotate are particularly chosen to provide a maximum amount of training in the various fields of medicine with which the general practitioner will be concerned.

The general residencies are integrated with the residencies for specialty training, and like them, are a part of a decentralized program, which rotates residents from the services at the University Hospital to any one of a number of affiliated hospitals. The general residents, under the present plan, spend six months of each year in the University Hospital and six months in an affiliated hospital.

The curriculum for the first two years includes two months on the medical wards of the University Hospital, and two months each in pediatrics, and obstetrics and gynecology in the same hospital. The outpatient service of the University provides two months each in dermatology, surgery and neuropsychiatry. The services in the affiliated hospitals are divided into medical and surgical. The resident spends three months of each year of training on one of these services.

The affiliated hospitals have organized their staffs to conduct resident training by conducting teaching ward rounds five days each week. A clinical-pathological conference is held once a week for nine months of the year, and an x-ray conference is conducted on the same schedule. In addition there is a clinical conference weekly for the study of diagnostic and therapeutic measures.

A review of the above program suggests that the present-day popularity of specialty training may be due to the fact that, until recently, such training was the only medium of postgraduate instruction. In the absence of extended preparatory courses for general practitioners there has been no alternative for a young doctor, who desired more training after a standard rotating internship, but to enter a medical or surgical specialty.

It seems reasonable to assume that because of the tremendous growth of medical knowledge, many interns may be hesitating to enter general practice because of a feeling of insufficient preparation, and therefore seek additional training and a sense of competence in the only manner which is now generally available—specialty training.

It has often been said, and rightfully so, that a well-trained general practitioner exceeds all the specialties in the breadth and detail of his knowledge and training, and that general practice is the most exacting of all the branches of medicine. Aside from the possibility that general residencies may induce more graduates to enter the general practice of medicine—even if such residencies furnish training only to those who would enter general practice anyway—we believe that programs similar to the one described above will be eminently worth-while.

THIS SHOULD BE FINAL!

FOR some years past we have been commenting on the Kaadts—Charley and Pete—who for years have operated a diabetes "cure" at South Whitley, Indiana. They have been in courts of many sorts during these years, but somehow have managed to evade punishment. It will be recalled that not so long ago the state medical board revoked their licenses to practice the healing art in the state of Indiana; they took the fight to the Whitley Circuit Court, which ordered the licenses restored. The medical board then appealed to the Indiana Supreme Court, which upheld the action of the board.

Meantime, the Kaadts went along with their operations until, finally, the federal court became interested. Trial was had in the Fort Wayne District Court, with Judge Patrick Stone, of Madison, Wisconsin, presiding. The Kaadts, along with their "superintendent," Robert Benson, were found guilty.

Judgment was recently pronounced, each of the Kaadts given total sentences of seven years, with fines of $7,000 and court costs of $2,145.72 in each case. Benson was fined $350 and given a suspended sentence of one year. In the case of the Kaadts, four years of each of the sentences were suspended on condition that the fines and costs be paid at once. They have appealed to the U. S. Circuit Court of Appeals, which is more or less routine.

Well, it took a long time to put a stop to this notorious violation of our medical laws and we sincerely trust this is the end of the many efforts to close the place. A short time ago we noted in a news dispatch that the place really was being closed, that the contents of the "Clinic" were being boxed, ready for removal.

There remains but a single action, a hearing by the medical board in the matter of the revocation of a Fort Wayne physician who is said to have identified himself recently with the outfit.

THE RABIES SITUATION

SOME years ago we heard a very prominent Indiana health official remark to the effect that "One of these days we are going to have a rabies epidemic, right here in Indiana." While this may not be *the* year, the fact remains that rabies is becoming very much of a problem, right here in our own state. Governor Gates professes to be very much concerned about the matter and is moving rapidly to do something about it, while Mayor Al Feeney, of Indianapolis, is up and doing in his plans to control the situation. He plans an appropriation of $5,000 for an antirabies immunization program, effective at once.

Governor Gates is speculating on using our dog tax money in a similar project.

Not alone is our capital city interested in the program, but cities all over Indiana finally have come to be aroused by the situation. The day when local health authorities issued a proclamation demanding that all dogs be confined or allowed on the public streets and highways only when on a leash—then forget all about such proclamations—seems to be at an end. We are facing a serious situation—a most critical one—and we must have immediate, concerted action to control it.

In the May first issue of the *Indianapolis Star* more than a half dozen cases of dogs with rabies are reported, some of which had bitten children. Not in our memory has there been a time when rabies was so commonly reported. And the remedy is so simple, the antirabies vaccination of all dogs. This treatment is in no wise harmful to our pets, but does give one the satisfaction of knowing *his* dog is not *mad*.

There are so many phases to the dog question; one of them, what is to be done with the dogs that run through many of our country districts; they are at least half-wild, have no place they can call home and have to forage for themselves. Most of the dogs are unceremoniously dumped in country roads by city folk who wish to rid themselves of them. Yes, it costs quite a bit to keep a dog in the city—they have to eat and even "dog food" has spiralled in price. But why turn them loose in the country? First thing you know they join up with a pack and begin killing poultry, sheep and even calves.

We are a lover of dogs—can't remember when we didn't have one or two; right now we have two—just common dogs, no fancy "papers" about them. But these dogs trek down to the small animal hospital every year, get their "shots," then we all rest easier until the next spring comes around. They have the run of the back yard, but it is completely fenced in.

Rabies has been a subject of much interest to us for more than forty years. Along about that time a local practitioner called me one day, stating he would like me to see a case with him. We drove to a neighboring community, entered a home, hearing the most bloodcurdling noise that ever came to my ears. Entering a bedroom we saw a man literally strapped to the bed, in the last throes of a death from rabies. To anyone who has had to witness such a thing there can be no argument against a universal campaign of antirabies vaccination.

It is time that Indiana wakes up to the fact that *we do have rabies in Indiana!* Just what to do about it is a matter for health officials and the law-enforcing agencies.

Editorial Notes

It is not too early to begin planning to attend the October annual meeting, in Indianapolis; this will, in a measure, be a "tune up" session, getting ready for the big "blow-off" next year, when we shall have reached our 100th birthday. The committee planning this big event for 1949 already is hard at work and we are sure the Anniversary Session will be the high-water mark in the history of one of the really live state medical organizations of the country.

Dr. William H. Larrabee, New Palestine, is a recent addition to the "fifty-year" class, having completed a half century of practice in that community. Dr. Larrabee, so it is said, graduated from the "horse and buggy" class, 'way back in 1907, hence may be said to be one of the pioneer "auto-physicians" in Indiana.

During these years he took time out to serve a term as State Representative, in 1923, and from 1930 to 1942 represented his district in the United States Congress.

Still active, Dr. Larrabee maintains his staff membership in several hospitals, in Indianapolis and at Shelbyville.

All indications point to a record registration at the annual meeting of the American Medical Association, to be held in Chicago June 21-25; Tom Gardiner, association business manager, pins his faith in a total registration of 30,000 or more. This of course includes physicians, their wives, exhibitors and all the others who go to make up a big A.M.A. meeting.

Mr. Gardiner warns, however, that some 6,000 hotel reservations are available, which means a problem for those who make a last-minute decision to attend. At the last annual session held in Chicago, in 1944, more than 7,000 physicians registered. However, at the Centennial meeting, in Atlantic City, last year, 15,667 doctors registered.

All the technical exhibits will be housed in Navy Pier, this year, affording ample room for everyone to take as much time as he wishes to see what is newest in medical and surgical appliances.

Members of the nursing staff of the Jackson County Schneck Memorial Hospital recently were feted at a dinner given by the hospital medical staff. From newspaper reports it would seem that was quite an elaborate party, one very much appreciated by the nurses.

Such things make one wonder if our hospital medical staffs *always* are appreciative of just what the nursing staff means to the hospital; a little party such as this goes a long way toward making the nurses "feel better," resulting in much better service from all concerned.

A hospital simply cannot get along without adequate nursing, hence staff physicians should make every effort to let these folk know their work is duly appreciated.

They seem to practice a long time, down in Indiana. On many occasions we have noted how many years this or that doctor has been attending to the various ills of local residents. Now, according to press reports, we learn that Dr. J. T. Kime, of Petersburg, has been "at it" for 59 years, having graduated in 1889. He told the news man that he expected to hang on for another 59 years!

Along in 1930 Mead Johnson and Company, of Evansville, began publishing a little leaflet naming the medical books that had been written the previous year; this was a little, four-page affair but met with a hearty response from the medical profession to whom it was sent. Since that time the idea has grown and for 1947 we have over a hundred pages in the publication, listing 563 medical books published last year.

It is a most interesting little volume, well indexed, and affords opportunity to all those who wish to add to their personal libraries an unlimited choice of titles.

"Of the making of books there is no end," someone said, a long time ago, and it would seem that during the past year an unusual number of physicians have "tried their hand" at writing a book.

Anyone interested in such matters will do well to contact Mead Johnson and Company, asking them to send a copy of their very worth-while publication.

The Surgeon General of the United States Army has sent out a bulletin to the effect that during 1947 there was an enormous drop in the number of cases of venereal disease in the Army—amounting to at least *40 per cent.* Much of this, he declares, is the result of "an intelligent appeal to the higher moral sense of the individual."

At long last we have an Assistant Secretary of the American Medical Association, something we have been advocating for many years, but never could "get by" Olin West on the proposition. We recall that several years ago the then Chairman of the Board of Trustees told us that he had taken Dr. West up to the Board room, *locked the door*, and proceeded to make it definitely plain that there should be an assistant. Dr. West told the chairman that he would "take it under advisement," and that was the end of the story.

There is too much for one man to do, this thing of acting as secretary and general manager of an extremely large corporation. No business outfit would consider such a thing!

It would seem that the choice of the board for this new spot is very timely, Dr. Ernest B. Howard having been named to the post. He has had much service in different organizations, is a graduate of Harvard School of Public Health, a medical graduate since 1936, hence not too old to take on a lot of work.

We are more than pleased with the appointment, feeling that it means a great step in the advancement of American Medicine.

According to press reports, Dr. Creighton Barker, Secretary of the Connecticut State Medical Society, addressed the staff of Welborn Baptist Memorial Hospital, urging the medical profession to "police its own ranks!" We would like to have heard this address for, knowing Creighton as we do, we are sure he "said something."

HOTEL RESERVATIONS FOR STATE MEETING

. . . It's time to make your hotel reservation for the state meeting at Indianapolis, Tuesday, Wednesday and Thursday, October 26, 27 and 28, 1948.

. . . Information about hotels, and a form for you to use in making your reservation, will be found on page 637 of this issue. The best rooms will go first. Send in your request immediately!

President's Page

FULL-TIME LOCAL HEALTH DEPARTMENTS

INCREASED awareness of the need for full-time local health departments, under the direction of full-time physicians, is evident throughout Indiana. In 1947 the Indiana General Assembly passed legislation which greatly facilitates the creation of full-time health departments. This legislation had the full support of the Indiana State Medical Association.

Members of local medical societies are assuming a major role in the promotion of such departments. The cities of Gary and Hammond have each established full-time departments. Physicians in these cities provided the initiative and stimulation for the program and for procuring well-trained public health physicians as health officers.

The city of Evansville and Vanderburgh County have established a combined city-county health department. The Vanderburgh County Medical Society took an active part in this development. There is considerable interest in the city of Muncie and Delaware County for the formation of a combined city-county health department. From the beginning this interest has been stimulated and guided by the county medical society and it expects to follow through to completion of the program.

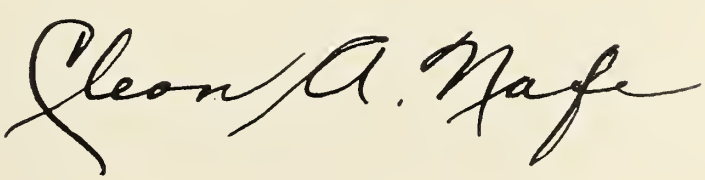
Physicians in Elkhart, Howard, and Kosciusko counties are studying public health conditions in these areas, looking toward the development of full-time county health departments through a referendum at the next general election.

The medical profession is rightfully assuming its leadership in developing better public health departments in our state. Such a program has been approved by our House of Delegates, and should have the support of all physicians. Indiana is behind our neighboring states in developing full-time local health officers, with adequate personnel. Evidence has been presented by our state health department that Indiana can do a better job in sanitation and contagious disease control if better facilities are available.

Under the sponsorship of the National Health Council, a meeting was held at Spring Mill Park during the week of April 19, at which representatives from professional and lay groups from Michigan, Ohio, Kentucky, Wisconsin, and Indiana discussed ways and means of promoting the establishment of full-time local health departments. Ray E. Smith, executive secretary of our state association, represented the state medical association at that meeting.

Interest in many counties of Indiana in improving public health facilities has crystallized in the formation of local health councils. Such councils have as their major objectives the study of their own problems, a determination of the facilities and personnel which exist to solve these problems, and additional action necessary to do a better job. There are seventy such local health councils in Indiana at the present time. Local physicians are taking, and should take, an active part in the development of these councils and give to them the leadership and guidance which physicians are qualified to give because of their medical background and experience.

Local public health programs are supplementary and complementary to practicing physicians. There should not, and must not, be any conflict between the two. Public health is a program in which county medical societies can take positive action and be of fine service to their communities. This is an excellent opportunity for creating good public relations.



WHAT EVERY MEDICAL OFFICER SHOULD KNOW ABOUT THE ATOMIC BOMB

I. Introduction to Nuclear Physics[1]

The atomic bomb has added a new terror and devastating force to the arsenal of war, and has increased the number of potential casualties which the Medical Department might be called on to handle in the event this weapon of destruction is employed in future warfare. National security makes it imperative that each Medical Department officer understand the fundamental facts regarding the medical effects of an atomic explosion. It is essential, therefore, that pertinent medical information on the problem be disseminated to those personnel who will be charged with the responsibility of caring for the sick and wounded resulting from the use of atomic weapons.

The electron. Units of negative charge of electricity, such as those used in any radio, electrons are produced by a hot filament in the tube elements. These electrons are evaporated from the glowing filament by the high temperature which is created in the filament. Careful measurements have shown that all of these electrons have the same physical properties. Furthermore, electrons produced from a glowing filament are exactly the same as electrons produced by other means, as, for example, by release from a photoelectric cell. The electron is the lightest particle known to man and weighs only 9×10^{-28} gm. The vast majority of all electrons found in nature are not "free" in the sense that they are not attached to something else, but are more or less tightly bound in a larger structure which is known as the *atom.*

The atom. An atom is the smallest part of a chemical element which enters into a chemical reaction. The concept of the atom as a structure which is mostly "space" is one which can be appreciated best by realizing the magnitude of atomic and nuclear dimensions. One gm. of hydrogen contains 6×10^{23} atoms. Thus, even if this gram of gas is contained in a very large vessel, the number of atoms per cubic centimeter is extremely high. Each hydrogen atom has a diameter of about 10^{-8} cm., or less than one hundred millionth of an inch. All atoms are composed of an inner part called the *nucleus* and an outer part called the *electron shell.* The hydrogen atom is conceived as consisting of a tiny nucleus about which circles a single *electron.* This nucleus of the simplest hydrogen atom is called the *proton.* A proton is simply a hydrogen nucleus and is formed by stripping off an electron from the hydrogen atom. The proton occupies negligible volume inside the hydrogen atom, even though it constitutes almost the entire weight of the atom. Its weight is 1,840 times greater than that of the electron.

The electrical nature of matter. Electrons are the only particles that are found within the atom outside of the nucleus, and, since they are negligibly small as compared to the atom, it is clear that the greatest part of the atom is a void. Why then should the atom possess such apparent shape or rigidity which we know from experience it must have? The reason for this lies in the electrical nature of the nucleus and of the electrons which speed about it in never-ending orbital paths. In every normal atom, the nucleus carries a positive charge of electricity which is exactly the same as the total negative charge of all the electrons within the atom. For convenience we call the charge carried by 1 electron —e (it is actually 4.8×10^{-10} electrostatic unit). It is known that each electron carries a discrete electric charge of —e unit. Each positive charged particle (proton) in the nucleus carries a charge of +e unit. For any neutral (uncharged) atom the number of protons within the nucleus is exactly equal to the number of orbital electrons in the atom. Between the protons inside the nucleus and the electrons outside of it, there exists an electrostatic force which pulls the particles together. This force of attraction is just balanced by the centrifugal force caused by the whirling motion of the electrons around the nucleus. Thus the electrons perpetually gyrate around the nucleus in orbital paths through the frictionless void of the atom.

The outer part of the atom. Starting with the simplest atom, hydrogen with its atomic number 1, the number of orbital electrons is one. The *atomic number* (Z) of any atom is equal to the number of protons in its nucleus. For heavier elements, more and more electrons are found in the orbits. Helium with Z=2 has two electrons, iron with Z=26 has 26 orbital electrons, and uranium has 92 such electrons. These electrons arrange themselves in definite ways about the nucleus and obey rigorous atomic rules. Thus, they build themselves up about the nucleus in systematic shells that are peculiar in that each shell can contain just so many electrons. When one shell is filled, the electrons start another shell which is farther from the nucleus. The electrons which are in the outermost shell are called the valence electrons. These determine the chemical properties of the atom. Since these outer electrons

[1] These are the first three of a series of ten papers prepared by the Special Projects Division, Office of The Surgeon General, and based on material presented in courses on medical aspects of atomic explosion. Reprinted from *The Bulletin of the U. S. Army Medical Department,* by permission of The Surgeon General, Department of the Army.

are farthest from the nucleus, it is reasonable to suppose that they will not be bound so tightly to the atom. The outer electrons are in a sense shielded from the nuclear charge by the inner electron shells so they cannot "see" the nucleus. On the other hand, the electrons in the innermost or "K" shell are close to the nucleus and are thus most tightly bound to it.

Ionization of an atom. If by some means we could pull one of the outermost electrons away from an atom, the resulting atom would no longer be electrically neutral but would have a net charge of +1. The process of removing an electron from an outer shell is called *ionization* and the resulting atom is called an *ion.* The combination of the positive ion and electron is known as an *ion pair.* An atom can be ionized by shooting high speed electrons at it. These minute projectiles may collide with some of the outer electrons and knock them out of their orbits away from the atom. From a medical viewpoint the ionization process is of tremendous importance, since it is the start of the process by which tissue suffers radiation damage. By bombarding an atom with very high energy electrons, it may happen that an electron in a "K" shell will be knocked out, forming a vacancy which is filled by one of the outer shell electrons. In this process energy is liberated from the atom in the form of an *x-ray.*

X-ray emitted from atoms. The emission of an x-ray from an atom always occurs when an electron from an outer shell fills a vacancy in a "K" shell. Because the electrons in atoms of different elements are bound to their respective nuclei with different energy, the energy of the x-rays given off will depend on the element which is producing them. X-ray tubes may have different elements for targets, and the rays emitted from a tungsten target are much "harder" than those from a copper target. The energy of radiation for x-rays is usually measured in electron volts. An electron volt is that energy which is acquired by an electron in being accelerated across a potential of 1 volt. In x-ray tubes the electrons emitted by the filament are accelerated by about 100 kilovolts, and we therefore say that these electrons acquire 100,000 ev (electron volts) of energy. X-rays sometimes behave as though they were "particles" and sometimes they act like "waves." In the literature, x-rays are often called *photons* or *quanta.* It is a fundamental rule in physics that every particle has associated with it certain wave properties and can be described as having a definite wave length. Wave length in the x-ray region is usually measured in terms of 10^{-8} centimeters or *angstrom units* (A°). If an x-ray photon has an energy of, for example, 1 million electron volts (1 Mev) it is said to have a short wave length or to be a very hard x-ray. On the other hand, if it is a photon of only .03 Mev it has a relatively long wave length and is said to be "soft."

The inner part of the atom. The nucleus of the atom, while it is a dense sphere taking negligible space within the atom, is composed of smaller units or particles. One of these particles—the proton—has already been mentioned, but little has been said about it. In addition to protons, every atomic nucleus, except that of hydrogen, contains another type of particle—the *neutron.* The neutron differs from the proton in that it does not have an electrical charge. Both the neutrons and protons are about the same in weight and each is 1,840 times heavier than an electron. Therefore the bulk of all matter is found within the nucleus. If you as an individual were suddenly to be disintegrated so that the nuclei in the atoms of your body were free to come together, all your weight could be concentrated in a speck on the end of a pin. Because the nucleus has its components so closely packed together, we say that it has high density. Along with this close packing of neutrons and protons, there must be some force which acts between these particles. Particles inside the nucleus are called *nucleons.* This force which acts between nucleons and holds the nucleus together is a queer type of force which is called *nuclear force.* It is this force that is responsible for the enormous energy which is locked up within the nucleus. The energy is usually called the "binding energy" of the nucleus since it binds the nucleons together in a compact system.

Gamma rays emitted from the nucleus. When the nucleus of an atom suffers a collision with a high energy atomic particle, it may become "excited" by virtue of having absorbed energy from the collision. One way in which the nucleus can get rid of this energy is by emitting a photon. This photon is called a *gamma ray* and differs from an x-ray only in that it is generally a higher energy photon. Otherwise a gamma ray emitted by a nucleus is identical with an x-ray. Once a nucleus emits a gamma ray, it may return to its former unexcited or normal state. Experimentally, many substances may be made to emit such gamma rays by irradiating them with a cyclotron beam or by placing them within a neutron reactor or pile.

Alpha and beta particles. About fifty years ago, it was observed that certain elements give off penetrating radiations. Elements such as uranium and radium give off a variety of radiations and are called radioactive elements. The phenomenon is known as *radioactivity.* Besides emitting gamma rays, these elements were observed to give off alpha and beta particles. *Alpha particles* are helium nuclei moving at high velocity. They are particles composed of two neutrons and two protons. Compared to an electron, such a particle is massive and might be expected to be easily absorbed in matter. This is actually the case, for most alpha particles are completely stopped by a few sheets of thin paper. This very short range of action for an alpha particle does not prevent it from being effective in damaging cell tissue. *Beta particles* are ordinary electrons which are emitted from nuclei. They

move with high velocity (almost the speed of light) and are not as easily stopped in matter as are alpha particles. Beta particles of a few million volts energy will, however, be completely absorbed by several thin sheets of aluminum. Beta particles are created in the process of emission just as x-rays are created. Before emission, an atom does not contain an x-ray, and, in like manner, neither does a nucleus contain any electrons.

Radioactive transformations and isotopes. In the act of emitting an alpha particle, a radium (element 88) atom must undergo a change in its nuclear structure, for the two neutrons and two protons which make up an alpha particle are subtracted from it. Technically, we say that the radium atom undergoes a *radioactive transformation.* To facilitate an understanding of these phenomena, it is necessary to introduce some nuclear nomenclature. The radium nucleus is indicated by the symbol $88^{Ra^{226}}$. Here the superscript is called the *mass number* and is numerically equal to the total number of neutrons and protons in the nucleus. The subscript 88 is the atomic number or *charge* and is numerically equal to the total number of protons in the nucleus. Elements such as tin (Z=50) have a variety of different weights since some tin nuclei have more neutrons than others. These atoms of tin which have different numbers of neutrons are known as *isotopes* of tin. *Thus isotopes are simply atoms whose nuclei have the same atomic numbers but different mass numbers.* Some elements have only one isotope; whereas others may have as many as ten isotopes, each of which is present in different proportions.

When $88^{Ra^{226}}$ emits an alpha particle (symbolized by $2^{He^{4}}$ since it has atomic number 2 and four nucleons in its nucleus), it transforms itself into a new element known as *radon.* This reaction may be written: $88^{Ra^{226}} \rightarrow 86^{Ra^{222}} + 2^{He^{4}}$ (radium goes to radon plus alpha particle). Analogous to chemical equations, it is possible to balance the equation and obtain a resultant atom of radon which has Z=86 and a total number of nucleons equal to 222. Instead of referring to this process as a radioactive transformation, we can also call it a *radioactive decay or disintegration.* The decaying isotope is the "parent" and the disintegration product the "daughter."

Radioactive series. Radium is only one of the many radioactive isotopes which occur in nature. Radium is itself the daughter of a thorium isotope which in turn is a daughter of a uranium isotope. There is thus a chain or series of isotopes that are respectively parent and daughter to each other. The radon that is formed from radium is also radioactive and decays to form polonium, and this forms an isotope of lead.

$$92^{U^{234}} \xrightarrow{a} 90^{Th^{230}} \xrightarrow{a} 88^{Ra^{226}} \xrightarrow{a} 86^{Rn^{222}} \xrightarrow{a} 84^{Po^{218}} \xrightarrow{a} 82^{Pb^{214}}$$

The *a* over the arrow indicates that an alpha particle is emitted in the decay process.

Lead is commonly thought of as a very stable element. By that is meant that it does not undergo radioactive decay. However, the isotope of lead that is formed in this radioactive series above is not stable. It has 214 nucleons in its nucleus, and since it must have 82 protons, there are 214—82 or 132 neutrons in the nucleus of this atom of lead. In the lead atoms found in nature the heaviest isotope is $82^{Pb^{208}}$. Thus the isotope $82^{Pb^{214}}$ is much heavier than the heaviest natural lead isotope for it contains six additional neutrons. Instead of emitting an alpha particle which would make the *neutron surplus* even worse, the lead isotope $82^{Pb^{214}}$ emits a beta particle, and the reaction is as follows:

$82^{Pb^{214}} \rightarrow 83^{Bi^{214}} + -1^{e^{0}}$ (lead goes to bismuth plus electron).

In this case, lead changes to an element of a higher atomic number, since the emission of an electron is equivalent to *adding* a charge of +e to the lead nucleus. In these nuclear reactions the electric charge is always equal on each side of the equation. Since the electron has negligible mass, the atomic weight of the isotope of bismuth is the same as the parent atom. By succeeding beta and alpha emissions the bismuth atom is finally transformed to a stable isotope of lead, $82^{Pb^{206}}$. This isotope is then the end of this series, which is called the uranium series. It must be remembered that in these decay processes penetrating gamma rays are also emitted; but, since gamma rays have no charge and no real mass, they do not affect the series relationships. In addition, two other naturally radioactive series are known—the thorium and the actinium series, both of which finally decay to stable isotopes of lead.

The rate of radioactive decay. Does the radium atom, for example, disintegrate in one second or in one year? Actually the process is statistical in nature, and, if one were able to look at one isolated radium atom, one might see it decay in a minute or one might have to wait a million years for it to disintegrate. If, however, we look at 1 gm. or 2.6×10^{21} of radium atoms, we find that there is an average value for the time in which 50 percent of these atoms will decay. This time is called the *half life,* and for radium it is 1,590 years. If we start out with 1 gm. of radium, then in 1,590 years we shall have only 0.5 gm. on hand. Radium is said to be long-lived, but other atoms have extremely short half lives of the order of one-millionth of a second. Still others, like $92^{U^{238}}$ (the heavy isotope of uranium), are long lived, having a half life of 490.5 years.

In order to calculate the activity of any sample of a radioactive material, multiply the number of atoms present as follows:

$$\text{Activity} = \frac{(\text{No. of atoms})\ (.69)}{\text{Half life (in seconds)}} = \text{Number of particles emitted per second.}$$

The activity of 1 gm. of radium can be calculated as follows: 226 gm. of radium are equal to 6×10^{23} atoms. Therefore, 1 gm. contains 2.6×10^{21} atoms, and since the half life is 1,590 years or 5×10^{10} seconds:

$$\text{The activity of 1 gm. of RA} = \frac{(2.6\times10^{21})\ (.69)}{5\times10^{10}}$$

$=3.7\times10^{10}$ disintegrations/second. The unit of measure of this activity is the *curie*. The millicurie (mc.) unit is one-thousandth of a curie. A millicurie of radium gives off 37 million particles in one second.

The quantity of radiation. In treating a patient with radiation from a radium capsule it is necessary to measure the dose which is given. For this purpose the unit is the *roentgen* (r.), which is defined as that quantity of x-radiation which on passing through 1 cc. of normal air produces 1 electrostatic unit of ions. While it was originally defined only for x-rays, the definition is equally valid for gamma rays. A smaller unit, the milliroentgen (mr.), is often used in practice. The definition is perhaps not too meaningful because of the term—electrostatic unit—which is used. Physically, one should think of the definition as meaning that quantity of x-rays which is measured by a certain number of ions produced in a standard volume of air (roughly, 2 billion ion pairs per cubic centimeter of air).

Different types of instruments can be used to measure x-radiation. These are ionization chambers, Geiger-Muller counters, and photographic emulsions. One should sharply distinguish between those instruments that measure the dose or total quantity of radiation and those which give the dose-rate or the intensity of radiation. Dose is measured in roentgens, whereas dose-rate is measured in roentgens per second or in other time units. It is one thing to give a patient a dose of 1 r. of x-rays and quite another to expose a patient to a dose-rate of 1 r. per second. In the latter case, the patient receives a 1-r. dose in one second and a 60-r. dose in one minute. In one hour the patient would be dead or fatally injured.

NUCLEAR FISSION AND THE CHAIN REACTION

We are now prepared to discuss nuclear fission. If by some process the compact atom nucleus can be split, it is known that part of the mass of the original nucleus will be transformed into energy. To appreciate this, we must discuss the mass-energy relation which was first put forth by Einstein.

The mass-energy relation. If in any reaction there is a decrease in mass of the reaction, Einstein's mass-energy equivalence law states that this mass is converted into some form of energy. The resultant energy may be evident in any of several ways. For example, radiation may be emitted as in gamma ray emission (radiant energy) or particles may be given high velocity (kinetic energy). In any event, $E=MC^2$ where E is energy released, M is decrease in mass, and C is velocity of light. Let us assume that a uranium-235 atom ($92U^{235}$) is split into two parts and that one-fourth of a mass unit is converted into energy. One mass unit has about the weight of one proton and is equal to 930 million electron volts of energy. One-fourth of a mass unit, then, amounts to about 230 Mev. Since the original $92U^{235}$ atom weighs 235 mass units, it is equivalent to a total energy of 220,000 Mev. Thus only about $\frac{1}{1{,}000}$ of the total energy content of the uranium atom is released in this process. In fission, the greatest part of the 230 Mev of energy is released in imparting high velocity to the split atom parts (*fission products*).

A physical picture of the nucleus. In the foregoing, we have indicated something of the nature of the nucleus. We can form a very useful model or picture of the nucleus by thinking of it as analogous to a water droplet. Inside the confines of such a sphere, the neutrons and protons are in a constant state of violent motion, bumping into each other incessantly but always remaining inside the sphere. So strong are the forces between the nucleons that they pull each other tightly together and do not let each other out of "view." As evidence of this close packing of neutrons and protons inside the nucleus is the fact that the uranium-238 atom (the heaviest naturally occurring isotope) is only slightly larger in diameter than the nucleus of a light element such as aluminum. Outside the nucleus, the extremely strong nuclear forces are not felt because they have a very short range of action. However, the protons inside the nucleus make themselves known outside the confines of the nucleus by their electrostatic field. This field forms a barrier around the nucleus which prevents any charged particles from entering the nucleus. If, however, the particle which seeks to enter it is uncharged, it cannot "see" the particle and offers no resistance to its entry. For this reason, neutrons of low energy can easily slip inside the nucleus, whereas protons of even very high velocity are barred.

A model of the fission process. It is a property of a few very heavy nuclei such as U-235 that, when a neutron is added to them, they react very violently by splitting into two almost equal parts. The process is called *nuclear fission*, and the isotopes which exhibit this unusual behavior are called fissionable. The heavy products of the fission reaction, i. e., the two halves of the heavy atom, are known as *fission products*. We can picture the fission process by again considering the liquid drop model of the nucleus. Let us imagine that before the neutron enters the U-235 nucleus all the 92 protons and 143 neutrons are in constant motion inside the spherical nucleus. Let us assume that,

because the nucleons are so close together and move so rapidly, they lose their individual identity and may be thought of as forming a fluid or liquid drop of uniform density. With the intrusion of a neutron into this balanced system, the liquid drop has energy added to it and becomes "excited." The particles inside the nucleus are set into more violent motion and the drop begins to lose its spherical shape. As it deforms into a nonspherical shape it sets up rapid oscillations that deform it still further into a dumbbell pattern. At this point the original sphere is essentially drawn out into two smaller spheres with a tenuous connecting link that then snaps. Then the two fission products shoot away from each other with high velocity. All this happens in an interval of less than 10^{-12} second and may be thought of as an instantaneous reaction.

Neutrons released in fission. When fission occurs neutrons are released. Over 99 percent of these neutrons are emitted within less than 10^{-10} second, but a small fraction of 1 percent are delayed for as much as one minute after fission has occurred. All neutrons, whether prompt or delayed, are emitted by the fission products. In addition to neutrons, gamma rays, beta particles, and sometimes alpha particles are emitted in the fission process. A reaction equation for a fission process can be expressed as follows:

$$92U^{235} + 0n^{1} \rightarrow 46Pd^{117} + 46Pd^{117} + 0n^{1} + 0n^{1}.$$

(Uranium-235 plus neutron gives 2 palladium isotopes plus 2 neutrons.)

This assumes that the nucleus splits into two equal parts. If one looks in a table of stable isotopes one finds that the heaviest natural isotope of palladium is $46Pd^{110}$, while the palladium isotopes shown in the reaction equation are much heavier, having seven more neutrons per atom. From experience, we know that these abnormally heavy isotopes are not stable and must by some means make up for the abundance of neutrons in their nuclei. This can also be thought of as a deficit of protons in the nucleus. It is thus understandable that neutrons are so quickly emitted by the fission products.

Radiations from fission products. In natural fission it is rare for a pair of fission products to have the same mass, and it is much more common for one of the products to be heavier than the other. In general, there are two groups of fission products, one with an average mass of about 95 and the other of about 139. Fission products are intensely radioactive, emitting high energy beta particles and gamma rays. By emitting beta particles, the isotopes which contain too many neutrons (or too few protons) tend to make themselves more normal, since beta-emission is equivalent to changing a nuclear neutron into a proton. Because the fission products are born with such extreme neutron excesses, it requires four or five separate beta decays to result in stable atoms. Thus, each fission product is often associated with a chain of radioactive isotopes and for this reason we speak of these as *fission chains.* Almost all fission products emit very penetrating gamma rays in addition to beta particles. The half lives for the various fission products vary from a fraction of a second to many years. The result of fissioning a large number of atoms is that we have an aggregate of many different fission products representing almost every element from atomic number 40 to 70.

The chain reaction. If we wish to talk about the fission of large numbers of uranium atoms, it is necessary to have large numbers of neutrons available. Because the fission process requires only one neutron to initiate it and yet gives off between one and three neutrons per fission, it is possible to use fission neutrons to start a chain of fission reactions. Each fission adds more neutrons to the reaction so that more and more reactions are possible. Such reactions are called self-sustaining or chain reactions. Since the fission process occurs so quickly, it is conceivable that, if we were to assemble a certain "critical" mass of fissionable material such as U-235, we could set off a series of fissions that would proceed so quickly that the recoiling fission products and radiations would raise the critical mass to a multimillion degree temperature within a fraction of a second. By definition, such a process would be explosive in nature. It is important to emphasize that the recoiling fission fragments that move with high speed cause the material through which they move to become hotter by kinetic collisions with other atoms. It is this heat caused by the motion of the fission fragments that causes an explosion to result. In like manner, if the energy is released at a slower rate, the heat may be tapped to be converted into power.

Prior to World War II, no pure U-235 was available. Ordinary uranium contains 140 times more U-238 than it does U-235. U-238 is not suitable for a chain reaction, because when it absorbs a neutron into its nucleus it merely changes into a heavier element without fissioning. Since the two isotopes of uranium are chemically identical, they can be separated only by exceedingly difficult physical methods. In fact, the methods presented so many technical obstacles that the Manhattan Project set up huge plants which used nuclear reactors running on natural uranium to generate a new manmade fissionable material—*plutonium* (Pu) (Z=94).

Plutonium. With neutrons released in the fission of the small amount of U-235 present in natural uranium, it was possible to sustain a chain reaction in a massive graphite-uranium pile. Under proper conditions a large number of the fission neutrons released in the pile can be absorbed by the U-238 atoms. This results in an unstable U-239 nucleus that rapidly decays by beta emission as follows:

$$92U^{238} + 0n^{1} \rightarrow 92U^{239} \rightarrow 93Np^{239} + -1e^{0}.$$

(Np is the symbol for *neptunium.*)

Neptunium is itself radioactive and soon decays

to form an isotope of element 94 which has been named plutonium. Thus:

$$93Np^{239} \xrightarrow{2.3d} 94Pu^{239} + -1e^{0}.$$

The figure 2.3d over the arrow means that this reaction has a half life of 2.3 days. Plutonium is a dense silvery metal similar to uranium U-235 in that it is fissionable with neutrons which are of low energy. Like U-235 it is also an alpha emitter, and, since it has a half life of 24,000 years, it is much more active than U-235, which has a half life of 7×10^8 years. The alpha activity of plutonium is sufficiently intense so that it constitutes a serious health hazard of about the same type as radium when it is deposited in bone.

The concept of critical size. One of the unique characteristics of an atomic explosive is that it must be assembled into a certain critical size before it can explode. The reason for this unusual characteristic is that the chain reaction will not be self-perpetuating unless there are sufficient neutrons to cause continued fission. Suppose, for example, we wish to run a chain reaction at a rate of 500 fissions per second and that each fission generates exactly two neutrons. This requires that one out of every two neutrons generated be used to create more fission, so that we have to have 500 neutrons being used every second to cause fission. This leaves an additional 500 neutrons which we can afford to "lose" from our system either by absorption not leading to fission or by loss through escape from the system. When the number of neutrons being produced over and above those needed to keep the fission reaction going at a fixed rate is exactly equal to the number of neutrons lost from the system, we say that the system is critical, and this mass of material is called the critical mass. Masses less than this are called subcritical and larger ones are known as overcritical masses. The trick in detonating an atomic bomb is to make an assembly of fissionable material overcritical as fast as possible and keep it together long enough so that an appreciable fraction of the atoms are fissioned. If one simply stacked up subcritical blocks of U-235 until the assembly was overcritical, the chances are that no explosion would result. There would be a neutron "flash" and the heat generated by the fission of a small fraction of the atoms would push the blocks apart and make the assembly noncritical. The neutron flash would, however, be a source of danger.

The atomic bomb. A logical way to assemble an atomic bomb might be to take two hemispheres of fissionable material each of which is subcritical and bring them very quickly together to form an overcritical mass. One hemisphere of pure U-235 might be imbedded in a large mass of material placed at the target end of a gun barrel. At the other end of the barrel might be another hemisphere which serves as a projectile. Separated by the length of the gun barrel, each hemisphere would be subcritical and safe, but by firing the one hemisphere down the barrel, it would attain a high velocity and weld itself together with the target into an overcritical mass. The inertia of the projectile together with the force of the expanding gas behind it might hold the system together for an appreciable length of time so that a large amount of the uranium is fissioned. This might insure a high "efficiency" for the reaction. While it is not possible to calculate the exact magnitude of the activity associated with the radiations emitted by an atomic explosion without revealing classified information, it is possible to make crude calculations based on very simple assumptions. These show that the radioactivity which results from an atomic detonation is equivalent to more than 1 million tons of radium.

Radioactivity induced by neutrons. If a neutron strikes a nucleus of some element such as sodium, it may be absorbed or captured by it. This process is described by the reaction equation:

$$11Na^{32} + 0n^{1} \rightarrow 11Na^{24}.$$

The resulting sodium atom is not normal and emits radiation. For this reason it is called radiosodium. Radiosodium emits a beta particle of 1.4 Mev and also a gamma ray. Thus, if an atomic bomb explodes close to sea water there will be a neutron-induced activity produced, since salt in the sea water is present to about 35 gm. per liter. Radiosodium has a half life of 14.8 hours, and for this reason the activity will persist for a few days before becoming negligible in intensity. Other elements can also be activated by neutron irradiation. This is the means by which carbon-14, radioiodine, and radiophosphorus are made.

II. Biologic Effects of Nuclear Radiation From an Atomic Explosion

The discovery of x-ray by Roentgen in 1895 opened to the world the field of ionizing radiation. In 1896, natural radioactivity was discovered by Becquerel while studying the fluorescent effects of different substances. While working with uranium, he found that photographic paper was darkened, and the air adjacent to the salts would conduct electricity and discharge an electroscope. In 1898 the Curies isolated radium from pitchblende. It was soon after the discovery of x-ray that Becquerel noted the biologic effects of radiation on skin. He carried a vial of radium in his vest pocket and discovered a burn on the underlying skin. This was the first indication of a biologic hazard. In the next decade, radiation was used extensively as a therapeutic measure on almost every known disease and frequently with disastrous results. It was not until 1903 that evidence of the marked sensitivity

of the blood-forming organs and the reproductive organs of animals sounded the first warning that other than skin effects were occurring. Since that time the use of x-ray and radium has been approached with appropriate caution. This is mentioned to show that radiation is not a new problem introduced by atomic explosions. The increased seriousness of the radiation problems, has, however, stimulated greater interest in studying the effects of radiation and especially the mechanism by which radiation produces biologic effects.

Mechanism of ionization. The radiations with which we are concerned are gamma rays, and alpha, beta, and neutron particles. The effect they produce on living cells is known as "ionization." A ray or particle strikes an atom within the cell, breaks off a negatively charged electron, and results in a positively charged atom which, with the negative electron, is known as an *ion pair*. It is the formation of the ion pair that produces the biologic changes in the cell. The different radiations act differently to produce ionization. Beta and alpha particles directly ionize by applying their kinetic energy in striking and dislodging an electron from the orbit of an atom. Gamma rays and neutrons must pass through an intermediate step. Gamma rays strike a free or lightly held electron and impart kinetic energy to that particle which, in turn, ionizes the tissue. Similarly, neutrons collide with nitrogen or hydrogen atoms in the tissue and strike off a proton which, as a secondary particle, ionizes the tissue. The end result in either case is the formation of ion pairs in the cell.

Before considering radiation effects, the quantitative unit of radiation must be understood. It is called a roentgen (r.) and is the quantity of x-ray or gamma radiation that will produce in 1 cc. of air, under standard conditions, ions carrying 1 electrostatic unit of electricity of either sign.

Generalities concerning biologic effects. Practically all radiation effects are either definitely injurious or of no value to the individual from the standpoint of survival or competition. Some injurious effects are permanent and some temporary. Injurious effects vary widely in their severity. Ionizing radiation produces not one, but many different effects, even on the same species or organism. Some effects of radiation may appear in the descendants of irradiated individuals. Injurious effects may be beneficial as in the treatment of cancer, a balance being sought between the beneficial destruction of cancer and the injurious effects to the surrounding healthy tissue. An interesting paradox is presented here. Although irradiation will destroy cancer, it will also, under some conditions produce cancer, as in the skin from repeated dosage.

External and internal radiation. In external radiation the source is outside the body and the radiation must pass through the skin to produce effects. With an external source, the radiation effect may be stopped by removing the source, moving away from the source, or by interposing adequate shielding between the body and the source.

In internal radiation the source is taken into the body by ingestion, inhalation, or through a break in the skin. The fission products or other radioactive elements are then deposited in the various organs of the body, the most important being a deposition in the bones in proximity to the bone marrow. When radioactive material is fixed in the tissue, it is excreted very slowly and so remains a constant source of radiation bombardment within the individual. There is no known process that will destroy or neutralize the radiation source, and methods to increase the excretion of the fixed material are unsatisfactory. The only limiting factor, other than excretion, is the normal decay rate of the radioactive element.

Tolerance levels. Past experience in the clinical use of x-ray and radium and laboratory experience in nuclear radiation have developed a level of radiation that is considered safe to absorb over a long period. This has been set at 0.1 r. per day of gamma or an equivalent amount of the other ionizing radiations. In all industrial processes an effort is made to stay within this maximum permissible dose.

With regard to internal radiation, the goal is no absorption. Specifically, in plutonium work, 1 mcgm. fixed in the bone is sufficient to require complete withdrawal from radiation work for life. A historic example of internal radiation injury is the occurrence of bone cancer and death among radium dial painters. The tolerance dose for radium fixed in the bone is only 0.1 mcgm.

Lethal dose. The lethal dose is fairly well established, and current thinking places the minimum dose that will be lethal for 50 percent of individuals (L. $D._{50}$) at 400 r. and the L. $D._{100}$ at about 600 r. When we speak of 400 r. as being lethal, we are speaking of irradiation of the entire body or total body radiation. Doses up to thousands of roentgens may be given to a small confined area of the body without causing serious injury except to the exposed area. The long-term effects of radiation ranging from the tolerance to the lethal dose are still obscure and the subject of some concern.

Biologic effects in tissues. Many theories have been advanced to explain injury from ionization, but the mechanism is still unknown. Among the more common are: (1) some chemical exchange that interferes with the normal interchange between the nucleus and the rest of the cell; (2) changes in permeability of the cell membrane; (3) production of a toxic substance in the cell; and (4) changes in the intercellular environment. When and if the true mechanism is discovered, we shall have a more substantial basis for recommending therapy, dosage, and possibly protective measures.

A single cell consists of several microscopically distinguishable parts that differ in chemical makeup. Since, under most conditions, all these parts are irradiated simultaneously at random, it is not

surprising that many effects may sometimes be observed in the same cell. Some of these effects, such as chromosome breaks, increased granularity of protoplasm, change in affinity for various stains, cytolysis, swelling of the nucleus or the entire cell, can be directly observed by various microscopic techniques. Less direct physical methods reveal other effects, such as changes in viscosity of the protoplasm, or in the permeability of the cell membrane. It seems probable that only a small fraction of the cellular effects produced has yet been observed. The complexity encountered in the observation of cellular effects is increased many fold when we attempt to observe or analyze the effect on the many-celled organism. Here we irradiate many different types of cells and tissues, each of which may exhibit its own pattern of effects. This becomes further involved with the possibility of a radiation effect on one tissue producing an indirect effect on others.

A latent period is frequently mentioned that is really a misnomer. It is the period that elapses between the time the tissue is irradiated and the effects manifest themselves. Obviously, this period is not latent, but one in which numerous successive changes are occurring, which eventually lead to observable changes. Concerning the nature of these intermediate changes we are in practically complete ignorance. The various body tissues are listed in the order of their sensitivity to radiation: (1) lymphoid tissue, bone marrow, lymphocytes, lymph nodes, and Peyer's patches; (2) polymorphonuclear leukocytes; (3) epithelial cells of the gonads, salivary gland, skin, and mucous membranes; (4) endothelial cells, blood vessels, and peritoneum; (5) connective tissue cells; (6) muscle cells; and (7) nerve cells.

Tissue responses to radiation. Concerning the sensitivity of tissues in general, the more primitive cells (leukocytes and reproductive cells) are more sensitive to radiation than highly specialized cells (brain cells). Whether the effect of ionization is direct, taking place within the cell, or indirect, resulting from alterations in the environment, is still a matter of conjecture. Both mechanisms may be active. The effect of radiation on extremely radiosensitive tissue is diminished when the tissue is subjected to decreased oxygen supply. Freezing definitely decreases radiosensitivity.

The recovery of damaged tissue depends on the dose absorbed and the type of tissue. Beyond a certain quantitative absorption of radiation, the cell will die regardless of type. The reversibility of any specific effect is dependent on reparative and regenerative properties of the tissue. Muscle, brain, and portions of the kidney and eye cannot regenerate. Repair results only in scar formation. Other tissues, such as blood forming elements, membranes lining body cavities or glands, depending on the dose, may regenerate and resume their normal functions; but tissues that have been damaged and regenerated may not respond after repeated ionization, which makes it imperative to avoid a repetition of the injury.

One of the peculiarities of radiation is the variation in response of the different species and between identical cells or tissues of the species to the same dose of radiation. Because of this characteristic, it is impossible to measure effects in terms of severity to a single specimen, and statistical methods of measuring must be applied. The most convenient way of measuring most effects is to set up as a criterion some occurrence that may be classified simply as present or absent, such as inhibition of cell division, failure to grow, or death. Graded doses are given to various groups of biologic subjects, and, after the exposed cells or organisms have been scarred, injured or uninjured, the percent of uninjured cells is plotted against the dose. This gives a survival curve. The term survival here denotes the ability to perform a certain normal act in spite of irradiation.

An example of species variation can be seen in the following figures. The doses of x-rays required to kill 50 percent of the animals were as follows:

Mice	500 r.
Guinea pigs	250 r.
Rabbits	825 r.

This species difference is unfortunate, because we need quantitative information concerning radiation effects on man; but we are unable to draw quantitative conclusions concerning man from the results of experiments on laboratory animals. Species variations reduce such conclusions to a semiquantitative status.

The response to the *rate of radiation* falls into three categories: (1) Many biologic effects with a given dose are the same regardless of the rate at which it is delivered. Some genetic effects fall in this category. (2) In some cases, a given dose produces greater biologic effects if the rate of delivery is decreased. This has been explained by postulating that during prolonged radiation radiosensitivity may increase. (3) In the remainder—about 50 percent—of the biologic effects, the effectiveness of a given dose decreases as the rate of exposure decreases. This has been explained by assuming a decrease in radiosensitivity or a recovery factor. Most known injurious effects fall in this category, which is fortunate, since otherwise the daily tolerance dose would have to be set lower than it is at the present, so that it would be impossible for an injurious cumulative dose to occur in the maximum employment of an individual in the vicinity of sources of radiation.

The *distribution and penetration* of radiation will cause the biologic response to vary. To produce damage, the radiations must reach the vital tissues. Since alpha particles (heavily charged) are highly ionizing, they are about 10,000 times as effective as gamma rays, but the range of action is limited by their poor penetration (about 0.1 mm. in tissue). This eliminates alpha particles as an external hazard as they may be shielded out with a piece

of paper or the skin, but when they are deposited internally in the bone marrow, severe damage because of their high ionizing ability results. Beta particles have a similarly poor penetration (about 5 to 10 mm. in tissue), but are also dangerous internally. Since they have a strong caustic effect on skin at short distances, they must also be considered among the external hazards. High energy gamma rays have a much less degree of ionization per centimeter of the distance they travel than alpha or beta particles, but their ability to penetrate and reach the deep tissues makes them a particular hazard in external radiation. Neutrons are also penetrating (depending on their energies), and their power of ionization is about five to six times as effective as that of gamma rays, which places this particle among the serious external hazards.

There follows a comparison of relative quantities of various qualities of radiation required to produce erythema, showing that the higher energy rays produce their ionization in the deeper tissues, and, in order to produce a skin effect, must be given in higher doses:

Radiation range	Exposure required to produce erythema
Grenz rays	100 r.
100 kv. x-rays	350 r.
200 kv. x-rays	600 r.
1,000 kv. x-rays	1,000 r.
Gamma rays (radium)	2,000 r.

Acute and chronic radiation. The acute must be separated from the chronic in any discussion of radiation injury. Acute injury results from large doses that produce clinically recognizable effects. Chronic injury results from doses ranging from the tolerance levels to about 10 r. a day. This is the subject of intensive research, but little data on man are as yet available. The results of animal experiments must suffice, because of the unsuitability of exposing human beings to this relatively unknown hazard. The most predominant effects expected of chronic radiation are shortening of the life span, premature aging, the production of malignancies; skin changes from beta, soft gamma, and x-rays; and genetic injury. In man it is said that radiologists and industrial workers exposed to x-ray show an increased incidence to leukemia. In mice, however, using doses ranging from tolerance to 8 r. a day, the latest reports indicate that the incidence of leukemia and lung tumor is not increased; when they occur, it is at an earlier age. The higher the rate of radiation, the earlier the onset. On the other hand, ovarian tumors do not depend on the rate of radiation, but on a minimal dose starting the process, the future course of which is not influenced by radiation. This minimal dose is cumulative, irreversable, and results in a higher incidence of tumors. Injury to mouse testes, however, is found to be reversible and only slightly responsive to cumulative dosage. Increased intensity of radiation over a short dose period will increase the damage.

The above findings have not been given to confuse the picture, but to illustrate the variation in responses of different tissue and the difficulty of attempting to evaluate the chronic effects of radiation on man.

Blood. Observations of the blood count should reflect injury to the blood-forming tissues. This is true for severe overexposure. Alterations in the blood picture may be observed within an hour after total body radiation. There is an initial leukocytosis that is followed by leukopenia with a relative decrease in lymphocytes and, several days later, a reduction in the erythrocyte count. An anemia is a manifestation of severe bone marrow damage and is often fatal. For exposure to small quantities of radiation, the leukocyte count is not a reliable index. The daily normal variations, existence of low-grade infections, and variations in counting technique are among the factors reducing its reliability in measuring the relatively small variations to be expected. A count on an individual exposed to frequent radiation showing a reduction, even when compared to the individual's previously established normal, is not a positive indication of radiation injury. The only importance that can be attached to a slight reduction in count would be that seen in an individual who is a member of a group exposed to radiation in which all show the same variation. That would possibly indicate an overexposure to radiation for the group.

Reproductive organs. The elements of the reproductive organs that are injured by radiation are the progenetors of the mature germ cells and the genes that transmit the hereditary factors. Permanent sterility can readily be produced by exposure to about 800 r. in the male and 600 r. in the female. Temporary sterility may be produced by much lower doses.

Genetic injury. Genetics is a complicated and somewhat obscure science. Although genetic injury is especially important because the effects are produced by cumulative dosage without regard to dosage rate or wave length, little is known of the actual genetic effects to be expected. Its study is complicated by the long life span of human beings, the small number of offspring, the lack of knowledge of the specific dose received, and the difficulty of controlling experiments. Much of the information now available is the result of studying the fruit fly and various species of fish, the direct application of which to man is difficult.

In general terms, the gene is a germinal factor that carries hereditary characteristics. There are dominant and recessive genes. Recessive genes must be contributed by both parents if the characteristic is to appear in the offspring, while the dominant genes may be contributed by either parent or both. Mutations are changes from the normal within the genes and may be deleterious

or beneficial to the race. Mutations may occur naturally or may be produced by radiation. Mutations in dominant genes may be detected in the next generation, while recessive mutations may go undetected for several generations. Since the majority of both natural and radiation mutations are recessive, little change can be expected in the first generation, and, being recessive, the probability that they will manifest themselves in a future generation is relatively small. In about 95 percent of mutations, whether spontaneous or radiation induced, the offspring will die during gestation or shortly afterward. Of the viable 5 percent, about 95 percent are deleterious, and, of these, about 96 percent pertain to other than sex chromosomes. The remaining are sex-linked mutations that are the exception to the general rule of recessives requiring generations for expression.

In Japan, the total dose received by the survivors of the atomic bombs of 6 and 9 August 1945 was very low for clear cut genetic effects; but in the next twenty years, through the sex-linked mutations, a change in the male-female ratio may be seen. Ordinarily, more males are born than females, but radiation may cause a decrease in male offspring. The occurrence of defective offspring may increase the stillborn birth rate, and there may be an increase in infant mortality because of congenital abnormalities. All this is being studied in Japan on a long range program being planned by the National Research Council. Many years, however, will be necessary before significant results can be obtained and evaluated.

III. Medical Effects of Atomic Explosion

Medical effects from the atomic bomb may roughly be divided into three categories: (1) trauma, (2) burns, and (3) radiation injury.

TRAUMA

Trauma was inflicted by the mechanical force of the explosion, either as blast or indirect trauma from flying debris. As in the case of the bombing of Britain, the latter was much more important.

Blast. The atomic explosion differs from an ordinary bomb blast in the extent of its range. No one was closer than several hundred meters to the bomb. At that distance the peak pressure must already have fallen, and its duration must have greatly decreased in comparison with what it was in the center. The explosion did not have the trip-hammer blow effect of high explosive, but was rather like a sudden violent gust of air that lasted for a brief but appreciable period. Japanese medical observers on the spot could not find any patients with direct damage to the internal organs caused by the blast. Necropsy of the early cases showed no evidence of blast damage to the lungs. Many persons reported having lost consciousness temporarily, with no history of direct trauma to the head. Observations tend to discount cerebral concussion resulting directly from the blast. A report shows a total of 17 ruptured eardrums at Hiroshima and 22 at Nagasaki. According to British investigators there is a great variation in the intensity of the blast pressure that will result in the rupture of the eardrums in man. In explosions where persons were subject to pressures of 45 to 100 lb. per square inch, less than half of a small group suffered rupture of the tympanum. The drum may, however, rupture under pressures as low as 2 to 4 lb. in excess of one atmosphere (g). The acceleration of the pressure may also be important in determining the incidence of blast effects.

Indirect trauma. Windows were broken about 20 km. away. The radius of complete collapse of the natives' wooden buildings was around 2.4 km., almost symmetrically distributed about the center. The incidence of mechanical injury was about 60 percent between 500 and 1,250 meters. It was only beyond 2,700 meters that the incidence of mechanical injury in the survivors began to fall off rapidly, but even at about 4,500 meters it was 14 percent. Fatal injuries, however, were almost entirely in the zone of complete destruction. Those indoors in heavy buildings showed a higher incidence of injury than those remaining in native Japanese buildings, because the concrete buildings had more glass windows than those of the native type. This ratio of injury applied only to nonfatal injuries in survivors. It is assumed that the total mortality from immediate trauma was higher in the Japanese buildings than in the concrete buildings at the same distance, because over a wide area of impact the Japanese buildings collapsed from blast while the concrete buildings generally retained their structural integrity. Exactly how much of the total mortality was caused by the traumatic factor will never be known, because within one-half hour following the blast both cities were swept by fire before rescue operations could be instituted. Consequently, even though mechanical injury was not directly responsible for death, it probably contributed vitally to the actual mortality. This accounts for the low incidence of severe forms of injury among the survivors.

Types of injury. The distribution of injuries by type in a group of patients at a military hospital was (1) fractures, 11.5 percent; (2) contusions, 53.8 percent; and (3) lacerations, 34.7 percent.

Flying glass was the cause of most lacerated wounds. The fragments were so small that in many cases clothing was sufficient to protect the body. In one case, at 1,000 meters, the patient was

struck by glass fragments which, even though they did not penetrate his trousers, struck with sufficient force to pierce the skin of the upper portion of the bared torso.

BURNS

The burns that occurred may be classified as (1) flash burns, which are the result of the direct action of radiant energy, and (2) flame burns. The latter were relatively rare, for the reason that it took some time, perhaps one hour as stated above, for the fires that were started following the blast to spread within the city. Consequently, those who did not escape were burned to death.

The radiant energy covered the entire width of the spectrum, which resembled that of the sun. Let us now consider only the ultraviolet, visible light, and infrared rays. None of these has a high degree of penetration, so that any solid object, such as clothing or foliage, was sufficient to produce a shadowing effect. Only surfaces exposed direct to the rays were affected by them, and as a result "profile" burns were common. The wood of dark-colored telephone poles was superficially carbonized at about 3,000 meters from the center. A temperature of 4,000° C. acting for 0.5 second is necessary to produce a second-degree burn. It appears that the injurious agents causing flash burns were of extreme intensity but of very short duration. Burns were remarkably common among those indoors, as it was summer and many of the windows were open. Burns were of no significance beyond 4,000 meters. Beyond 3,000 meters few burns required treatment. Of the deaths attributed to burns, 53 percent occurred within the first week and 75 percent within two weeks. Symptoms associated with the burns varied from case to case but tended to follow a fairly definite pattern. In individuals close to the blast, both burns and blisters were apparent in five minutes. In the vicinity of 1,500 meters, burns appeared in two hours and the blisters in four to six hours. Within about 2,000 meters, the burns appeared in about three hours and blisters after ten hours. In one patient at approximately 2,000 meters, however, there was vesiculation within ten minutes.

Effects of radiant energy on the eye. Direct injuries to the eye were remarkably few. Only a few palpebral burns were noted. The shadowing effects of the supra-orbital ridges and the blink reflex help to explain this finding. Almost all of the patients had temporary amblyopia that lasted for an average of five minutes. A few patients had conjunctivitis and keratitis. Only one patient with a permanent scotoma from perforation of the macula lutea was reported. Two patients suffered traumatic cataract following contusions of the eyeball. A slight reduction in the transparency of the cornea was observed in some, but they presented no subjective difficulties. One patient was so blinded by the flash that he was unable to distinguish light from dark for two days, but he made a complete recovery.

Keloid changes. Keloid changes appeared frequently and in many cases were extreme. According to Japanese physicians, a high incidence of keloids is not characteristic of their race, and they attributed it to the extreme temperature. It has been noted, however, that where skin flaps were removed for plastic surgery, healing resulted in keloid changes. Follow-up studies of this problem are being made by the National Research Council Committee on Atomic Casualties.

Pigmentation and depigmentation. Among the striking features of burns were the changes in pigmentation. At a distance of about 2,000 meters beyond center, the pigmentation, due to ultraviolet rays, was extreme and resembled a walnut stain, the "mask of Hiroshima." These burns were preceded by an intense erythema, which within a few days became increasingly pigmented. Surrounding the hyperpigmented area, a sharp border was seen in which was found a zone where there was even less than normal pigment. This zone represented an area where some melanophores had left to enter the hyperpigmented tissue. This pigmentation began to fade only in a few cases at four months and in many cases still persists. Depigmentation of the exposed skin caused by total destruction of pigment occurred at distances less than 2,000 meters. It was not necessarily associated with scarring of the skin. There was histologic evidence of loss of pigment in the basal layers, even though the epithelium of the surface was not destroyed. At the margins of the depigmented zones there was found a narrow band of increased pigmentation external to which there was a vaguely defined depigmented border as described above. In the area of depigmentation the arrectores pilorum muscles were not damaged, since there was gooseflesh in these areas to the same extent as in the completely undamaged skin.

Etiology of the burns. Certain features of the burns suggest the action of specific wave lengths, probably in the ultraviolet range. The intensity of the pigmentation at about 2,000 meters and, closer to the blast, the extreme depigmentation without destruction of the skin were certainly unusual results of thermal injury. It must be remembered that a relatively small quantity of air intervened between the patients and the bomb in comparison with the entire atmosphere and stratosphere that filter much of the ultraviolet from the sun. Gamma rays were not responsible for the sharply outlined pigmentary phenomena that have been described, since clothing would be no barrier to their action.

Protective effect of clothing. Clothing exerted a protective effect depending on a series of interrelated factors, including: (1) Distance. A khaki uniform, coat, and shirt worn together were protective beyond 1,500 meters. Closer to the bomb, clothes were no protection. In some instances clothing actually caught fire and the resultant flame burns were among the most severe that were encountered. (2) Color and shade. Darker shades absorb more

heat than lighter shades. The effect of selected absorption in many cases was remarkable. At about 1,600 meters, in the case of a white rayon shirt with a pattern of dark blue polka dots, 2 mm. in thickness and 1 cm. apart, the polka dots were burned in the line of the rays, but the intervening white material was undamaged. Extremely interesting was the effect on cotton cloth with flower pattern in a light pink background. The flowers were dark red roses with leaves of varying shades of green. Some of the flowers were entirely burned out, others showed only scorching of the darker portions of the leaves and petals, while the intervening material showed no effects. (3) Tightness. Where the clothing was more tightly stretched over the scapular and deltoid regions, burns were much more likely to occur. (4) Thickness and number of layers. The seams and double layer of the folded over collar demonstrated the protective effect of the thickness of clothing.

RADIATION INJURY

Skin. Epilation was frequently observed in persons who had been close to the bomb and who had survived for more than 2 weeks. At around 500 meters the incidence was about 75 percent and fell off sharply at about 1,250 meters. The time of the onset of epilation reached a very sharp peak between the thirteenth and fourteenth days after the bombing. The hair suddenly began to fall out in bunches on combing or general plucking, or it was found in considerable quantities on the pillow in the morning. This process continued for one or two weeks and then ceased. In most cases the distribution was that of an ordinary baldness, involving first the frontal and then the parietal and occipital regions, and sparing the temporal regions and the scruff of the neck. The eyebrows and even more so the eyelashes and beard were relatively resistant. In one group of patients coming to autopsy, 48 had epilation of the head, 8 of the axilla, 6 of the pubic region, 4 of the eyebrows, and 2 of the beard. Complete epilation is not necessarily correlated with a bad prognosis. Of all individuals who died of radiation effect at about the fourth week fourteen percent had no epilation. It can be assumed that they had received some shielding from concrete buildings or other sources, thereby filtering out the softer rays, and that death resulted from the hard penetrating rays that have little effect on the skin. Even in severe cases, the hair had begun to return by the middle of October and two or three months later had fully returned. In no case reported was epilation permanent.

Gastrointestinal tract. In many patients, severe nausea and vomiting occurred as early as thirty minutes following the detonation. In others it did not occur until the next day. Thirty-two percent of those within a radius of about 1,000 meters and 23 percent at a distance of around 1,100 to 1,500 meters suffered from vomiting on the day of the bombing. The incidence fell sharply to 6 percent at around 2,000 meters. In many patients diarrhea, sometimes sanguineous, occurred within the first few days.

Testes. Histologically, radiation effects on the testes were discernible as early as the fourth day and were profound in all fatal cases in individuals who had been within about 1,500 meters of the bomb. Only three of the 23 patients studied who had been within 1,500 meters had a sperm count in excess of 40,000 (lower limit of normal). Of 39 who had been within 2 km., 13 had counts below 40,000. It is unusual for pregnancy to occur if the sperm count is below 40,000. Several of the patients complained of a loss of libido or even loss of potency following the bombing. According to Japanese physicians the return to normal has been slower in the male than in the female.

Ovaries. Histologically, the ovaries showed less striking changes than the testes. During the war years in Japan, there was a high incidence of amenorrhea, increasing from 4.3 percent in 1932 to 12 percent in 1944. In 1944, the incidence among 316 nurses of the Tokyo University was 13.3 percent. According to Japanese gynecologists, this was due to malnutrition, overwork, and anxiety associated with bombing. Thirty-six percent of the women in Hiroshima and 29 percent of the women in Nagasaki, between the ages of 15 and 49, who were within a distance of about 5,000 meters, experienced menstrual disorders. The majority of these had one normal period following the bomb and had cessation for an average of three to four months. A year later no patients were found complaining of menstrual disorders attributable to the bombing.

Purpura. In the skin, purpura was almost always manifested in patients dying in the third to sixth week, inclusive. Its incidence at various distances from the blast center ran almost exactly parallel to that of epilation and fell off sharply beyond 1,250 meters. Purpuric spots appeared at about the same time as fever. Their peak was between the sixteenth and twenty-second day, about five days later than the peak of epilation. Associated with their onset, there was an increased tendency to bleed from lacerations, fractures, and burns. Healing of wounds was prolonged, coincident with the appearance of radiation sickness. The growth of granulation tissue stopped, and no tendency to heal was shown. In those who survived, the granulation tissue improved following recovery from radiation sickness associated with the purpuric spots on the skin. After the onset of the purpura of the skin, hemorrhages were also found in the gingivae and from the rectum, nose, urinary tract, and respiratory passages in that order of frequency. The lungs were frequently involved in a necrotizing and hemorrhagic process.

CLINICAL SYNDROME IN RADIATION SICKNESS

Patients who died within the first two weeks. In this group there was histologic evidence of radiation effects on the skin, gastrointestinal tract, lymphoid tissue, bone marrow, or gonads, but these have not been clinically manifested. There was no epilation or purpura. Patients complained of nausea and vomiting on the first day of the bombing, followed by anorexia, malaise, severe diarrhea, thirst, and fever. Death in delirium ensued. Profound leukopenia was present. Temperature records in all these patients were remarkably similar. Usually between the fifth and seventh days, and sometimes as early as the third day, there was a steplike rise in temperature, usually continuing to the day of death. The earlier the fever, the more severe the symptoms and the poorer the prognosis. The bloody diarrhea resembled that of bacillary dysentery.

Patients dying the third, fourth, fifth, and sixth weeks or surviving severe symptoms. In this group, the anatomic and clinical results of radiation attained their acme. Epilation and hypoplasia of the bone marrow were marked. The hemorrhagic and necrotizing lesions were comparable to those seen in aplastic anemia and agranulocytosis, and occurred in the gums and respiratory and gastrointestinal tracts. Petechiae of the skin were almost always present. The sequence of symptoms was as follows: In a typical severe case, the first evidence of the disease was nausea and vomiting on the day of the bombing, followed by a feeling of malaise. The patient then began to improve and felt fairly well until about the beginning of the second week when epilation began. A few days later he again experienced malaise and a steplike fever developed. At about the same time pharyngeal pain frequently appeared. Sanguineous diarrhea was a prominent symptom. The leukocytes and platelets reached very low levels, and a profound anemia was present.

In a third group in whom the bone marrow failed to recover, the symptoms described in the second group continued, and the patients died of extreme emaciation after a prolonged illness. In others, concomitant with partial or complete recovery of the marrow, most of the striking manifestations classed as anemia disappeared, but they succumbed to such complications as lung abscess and tuberculosis.

Books

Books received are acknowledged in this column, and such acknowledgment must be regarded as a sufficient return for the courtesy of the sender. Selections will be made for more extensive review in the interests of our readers and as space permits. Books listed in this department are not available for lending. Any information concerning them will be supplied on request.

* * *

RECEIVED

SEXUAL BEHAVIOR IN THE HUMAN MALE. By Alfred C. Kinsey, Professor Zoology, Indiana University; Wardell B. Pomeroy, Research Associate, Indiana University; and Clyde E. Martin, Research Associate, Indiana University. 804 pages with 162 tables. Cloth. Price $6.50. W. B. Saunders Company, Philidelphia, 1948.

* * *

ADVANCES IN MILITARY MEDICINE. Vols. I and II. Made by American investigators under the sponsorship of The Committee on Medical Research. 900 pages with 94 illustrations. Cloth. Price $12.50 net. Little, Brown & Company, Boston, 1948.

* * *

A MANUAL OF CLINICAL THERAPEUTICS. By Windsor C. Cutting, M.D., Professor of Therapeutics, Stanford University School of Medicine. Second edition. 712 pages, with 30 illustrations. Cloth. Price $5.00. W. B. Saunders Company, Philadelphia, 1948.

HERNIA. By Leigh F. Watson, M.D., Los Angeles. Certified by the International Board of Surgery; formerly Associate in Surgery, Rush Medical College, Chicago. Third edition, enlarged and revised. 732 pages, with 323 illustrations. Cloth. Price $13.50. The C. V. Mosby Co., St. Louis, 1948.

* * *

OPERATIVE GYNECOLOGY. By Harry Sturgeon Crossen, M.D., Professor Emeritus of Clinical Gynecology, Washington University School of Medicine; and Robert James Crossen, M.D., Assistant Professor of Clinical Gynecology and Obstetrics, Washington University School of Medicine. Sixth edition, revised and reset. 999 pages, 1334 illustrations, 12 color plates. Cloth. Price $15.00. The C. V. Mosby Co., St. Louis, 1948.

* * *

THE PRACTICE OF GROUP THERAPY. S. R. Slavson, Editor. 271 pages. Cloth. Price $5.00. International Universities Press, New York, 1948.

* * *

TREATMENT IN GENERAL PRACTICE. By Harry Beckman, M.D., Professor of Pharmacology, Marquette University School of Medicine, Milwaukee. Sixth edition. 1129 pages. Cloth. Price $11.50. W. B. Saunders Co., Philadelphia, 1948.

* * *

THE BATTLE OF THE CONSCIENCE. By Edmund Bergler, M.D., Washington, D. C. 296 pages. Cloth. Price $3.75. Washington Institute of Medicine, Washington, D. C.

A MANUAL OF PHARMACOLOGY. By Torald Sollmann, M.D., Professor Emeritus of Pharmacology and Materia Medica in the School of Medicine of Western Reserve University, Cleveland. Seventh Edition. 1132 pages. Cloth. Price $11.50. W. B. Saunders Company, Philadelphia, 1948.

* * *

OCCUPATIONAL MEDICINE AND INDUSTRIAL HYGIENE. By Rutherford T. Johnstone, M.D., Consultant in Industrial Health; Lecturer at the University of California, Los Angeles. 604 pages, 117 illustrations (7 in color). Cloth. Price $10.00. The C. V. Mosby Company, St. Louis, 1948.

* * *

BRIEF PSYCHOTHERAPY. By Bertrand S. Frohman, M.D., Beverly Hills, California, with the collaboration of Evelyn P. Frohman. 265 pages. Cloth. Price $4.00. Lea & Febiger, Philadelphia, 1948.

* * *

DIABETES MELLITUS. By Arthur R. Colwell, M.D., Associate Professor of Medicine and Director of Medical Specialty Training, Northwestern University Medical School. 350 pages, with 24 illustrations and 30 tables. Cloth. Price $5.25. Year Book Publishers, Inc., Chicago, 1948.

* * *

MODERN COSMETICOLOGY. By Ralph G. Harry, F.R.I.C., head of the Cosmetic Department, Beecham Research Laboratories, Ltd. Third revised edition. 515 pages, with illustrations. Cloth. Price $12.00. Chemical Publishing Co., Inc., Brooklyn, 1948.

* * *

TEXTBOOK OF GYNECOLOGY. By Emil Novak, M.D., Assistant Professor of Gynecology, the Johns Hopkins Medical School; Gynecologist, Bon Secours and St. Agnes Hospitals, Baltimore. Third Edition. 742 pages, with 484 illustrations. Cloth. Price $8.00. Baltimore: The Williams & Wilkins Company, 1948.

CLINICAL DIAGNOSIS BY LABORATORY METHODS—A Working Manual of Clinical Pathology. By James Campbell Todd, M.D., with the collaboration of George Giles Stilwell, M.D., Division of Clinical Laboratories, The Mayo Clinic. Eleventh edition. 954 pages with 397 figures. Cloth. Price $7.50. Philadelphia and London: W. B. Saunders Company, 1948.

* * *

THE ACUTE BACTERIAL DISEASES—Their Diagnosis and Treatment. By Harry F. Dowling, M.D., Clinical Professor of Medicine, George Washington University, and Harold L. Hirsh, M.D., Assistant Professor of Medicine, Georgetown University. 465 pages with 55 figures. Cloth. Price $6.50. Philadelphia and London: W. B. Saunders, Company, 1948.

* * *

ENCYCLOPEDIA OF MEDICAL SOURCES. By Emerson Crosby Kelly, M.D., Associate Professor of Surgery, Albany Medical College. 476 pages. Cloth. Price $7.50. Baltimore: The Williams & Wilkins Company, 1948.

* * *

THE YEARBOOK OF PSYCHOANALYSIS. Volume III-1947. 309 pages. Cloth. Price $7.50. New York: International Universities Press.

* * *

PSYCHOBIOLOGY AND PSYCHIATRY—A Textbook of Normal and Abnormal Human Behavior. By Wendell Muncie, M.D., Chairman, Medical Advisory Board, Seton Institute, Baltimore; associate professor of Psychiatry, Johns Hopkins University. Second Edition. 620 pages with 70 illustrations. Cloth. Price $9.00. St. Louis: The C. V. Mosby Company, 1948.



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Medical Panorama by the Associate Editor

COUNCIL ON NATIONAL EMERGENCY MEDICAL SERVICE

EMERGENCY COUNCIL RECOMMENDS 6-POINT PROGRAM. The April 5 and 6 Spring Session of the A. M. A.'s Council on National Emergency Medical Service was most successful —in attendance, educational benefit, and nationwide recognition obtained. Over 125 representatives of state societies, national health and disaster groups, and the Armed Services were present, and at the session's end spoke most enthusiastically about its value.

Presented were the medical implications of special weapons warfare, the part to be played by military and civilian groups, and the need of the Armed Forces for medical personnel. The Departments of Army, Navy and Air Force requested the considered medical advice of the American Medical Association in planning medical services for the current expansion of the Armed Forces and the possible contingencies in event of a declared national emergency.

Recommended by the Council, under the leadership of Dr. James C. Sargent, Milwaukee, Chairman, and Dr. Richard L. Meiling, Columbus, Secretary, was this 6-Point Program: 1) One medical examination to cover screening, induction and assignment of selectees; 2) Hold "calling up" of medical officers until actual employment for medical care of patients is required; 3) Adoption by Armed Forces of VA medical program type of relationship with the civilian medical facilities and personnel within Continental United States; 4) Give civilian medical reserve officers ranks equal to career men of the Armed Forces; 5) Continue medical scientific education and essential civilian medical and scientific research throughout national emergency; and 6) Establish a National Emergency Medical Board as an agency of the National Security Resources Board.

ASSAIL PLAN FOR DRAFTING OF DOCTORS. At its recent meeting in Chicago, the Council on National Emergency Medical Service adopted resolutions assailing the government's proposal to induct physicians by law into the armed services.

The Council's objections, summarized in a statement prepared by the A. M. A. Bureau of Legal Medicine and Legislation, have since been reaffirmed by the Executive Committee of the A. M. A. Board of Trustees. The complete statement, which has been forwarded to congressional committees considering proposed legislation to reactivate Selective Service, follows:

"Preliminary prints of a Senate bill to provide for the Common Defense by Increasing the Strength of the Armed Forces of the United States, and to provide for a Universal-Training Program contain a section which would authorize the President, pursuant to requisitions submitted by the armed forces, to make special calls for members of the medical, dental and veterinary professions, which have not yet reached the age of forty-five at the time of such call, in such classifications and in accordance with such priorities as he shall determine. Persons so called will be liable for induction for service in the armed forces in accordance with such procedures as the President shall prescribe.

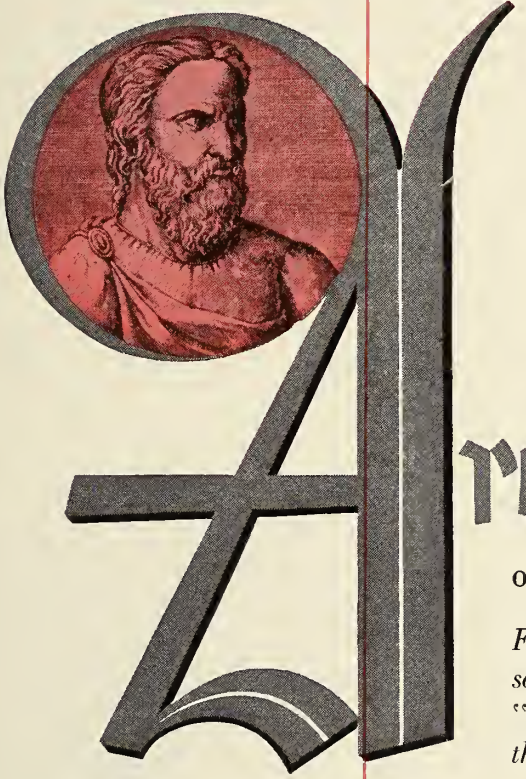
"Such a provision is unnecessary, discriminatory and constitutes a reflection on the patriotism of the medical, dental and veterinary professions. Confining this statement of the proposed induction of physicians, it is strongly urged that during World War II, the medical profession met every demand for medical personnel without compulsion by law. It will do so again if the need arises. The provision is therefore unnecessary and infers that in the case of urgency the medical profession will not respond to the needs of the armed services. It would seem to be predicated on a lack of faith in the patriotism of members of the profession. There is nothing in the history of American medicine to warrant such an inference.

"If a revival of the selective service program is made effective, there will arise a need for scientific and technical personnel, other than the three groups specifically mentioned, who are above the age limits to be applied to selectees generally. Until provision is made for the induction of such other personnel, it is discriminatory to single out physicians, dentists and veterinarians and subject them to compulsory induction.

"The Association, through its Council on National Emergency Medical Service, has been actively engaged for many months in planning for the medical, health and sanitary needs of the nation in event of a national emergency. At a meeting held in Chicago, Tuesday, April 6, the Council gave careful consideration to the present proposal to induct physicians by law into the armed services. Resolutions were adopted embodying in substance the objections to the proposal summarized in this statement. These objections have since been reaffirmed by the Executive Committee of the Board of Trustees which has authorized this statement.

"It is urged, therefore, that the provision under which physicians may be inducted as such by compulsion of law be eliminated from proposed legislation to revive selective service."

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What's Going On In Indiana by the Executive Secretary

Fiftieth Anniversary Party.—The Lake County Medical Society will celebrate its fiftieth birthday anniversary June 10 with a gala party at Hotel Gary, beginning with a dinner and followed by entertainment, for members and their ladies. The society was established in 1898 with eleven charter members, at the instigation of Dr. William Frederick Howat of Hammond. Dr. J. C. Pannenborg of Hammond was the first president and Dr. T. W. Oberlin, also of Hammond, was the first secretary. In 1904 Indiana Harbor was founded as a part of East Chicago and the membership jumped to 25.

Along about 1907 Gary was founded and there was an influx of physicians into the area. At the beginning of 1948 the membership of the Lake County Medical Society was 277. It was the first Indiana county medical society to employ a full-time executive secretary. Lake county has produced many outstanding leaders in state medical association affairs. Congratulations to Lake County Medicine upon completion of a half century of progress!

——ISMA——

The Weekly Radio Program.—Under auspices of the Committee on Publicity, a 15-minute radio program is broadcast at 9 o'clock each Saturday morning over WFBM, Indianapolis. The programs are procured from the American Medical Association and are recordings. "Medicine Serves America" is the title of the present series. For the past six months the Radio Committee of the Woman's Auxiliary to the I.S.M.A. produced a "live" program every five or six weeks, using the period allotted to the association by WFBM. Mrs. Lyman T. Eaton of Franklin, chairman of the auxiliary committee, wrote the scripts and produced the playlets. In at least three Indianapolis public schools children in the social hygiene classes listened to the broadcasts and then discussed their contents in the classrooms. This is an excellent program of health education. County medical societies can get the A.M.A. transcriptions by merely asking for them. Societies which have radio stations within their boundaries may wish to duplicate what is being done at the state level. It's a good project for the Woman's Auxiliary. Give the wives a job. They'll like it!

——ISMA——

Will Ask Nurses Board Changes.—The 1949 state legislature will be asked by the Indiana State Nurses Association to revise the 27-year-old nurses board law. Of interest to the medical profession is the decision to write into the new law the provision that girls be admitted to accredited nurse training schools at the age of 17 instead of 18, and that girls be eligible to take the state nurse board examination at 20, a year earlier than is provided by the present law. This revision will very likely meet with universal approval. It is reported that some girls intending to take up nursing have graduated from high school at 17 and, forced to wait a year, have taken employment and, liking their work, gave up the idea of a career in nursing. The new law would eliminate the waiting period for 17-year-olds and, possibly, increase enrollment in the nurse-training hospitals. The section in the law giving the state board authority to license practical nurses will be retained. The law provides that after a year's training the state nurses board may license women to do practical nursing of the chronically and subacutely ill. Efforts are now being made to establish a practical nurse training school in Indianapolis, or such schools in various parts of the state. The other proposed changes in the state nurses registration law are mostly technical, such as bringing the terminology up to date, elimination of unnecessary wordage, etc.

——ISMA——

Protests Against Compulsory Meetings.—The Indianapolis Medical Society has adopted a resolution protesting against the policy of requiring physicians to attend medical meetings. Copies of the resolution were mailed to all delegates to the American Medical Association House of Delegates and to all county medical societies in the United States. The resolution said, in part: "We, the members of the Indianapolis Medical Society, do hereby resolve that the welfare of the medical profession, its scientific advancement and the furtherance of public interest are continuously being harmed by organizations which demand compulsory attendance of physicians at meetings. To this end we instruct our duly elected delegates to the Indiana State Medical Association to introduce proper measures at the next meeting of the House of Delegates to the effect that all organizations which require compulsory attendance at their meetings no longer be approved by the American Medical Association; and, we further instruct our delegates to use their utmost influence to obtain the passage of such a resolution."

——ISMA——

This and That. Physicians reporting names of women who are afflicted with epilepsy and should not be operating motor vehicles are asked by the director of the Bureau of Motor Vehicles to give their given names, such as "Mrs. Mary Jones," and not "Mrs. John Jones." . . . The Council's next meeting is July 11.



It's Time To Write For Hotel Reservations For The 1948 State Meeting!

In Indianapolis

October 26-27-28, 1948

Tuesday night, October 26—Stag party and entertainment

Wednesday, October 27—Scientific meetings all day

Thursday, October 28—Scientific meetings and annual banquet at night

Mail Coupon Below Direct to Hotel of Your Choice

Hotels and Locations	Single Rooms	Double Rooms	Double Twin Beds
ANTLERS, 750 N. Meridian St.	$3.50 up	$5.50 up	$7.50 up
CLAYPOOL, 14 N. Illinois St.	$3.00-$6.00	$5.00- $8.00	$6.00- $9.00
ENGLISH, Monument Circle	$1.75-$3.50	$3.00- $6.00	$5.00- $6.00
HARRISON, 51 N. Capitol Ave.	$3.25-$6.00	$4.75- $7.75	$6.50- $8.25
LINCOLN, 117 W. Washington St.	$3.50-$6.50	$5.00- $8.50	$6.50- $8.50
MAROTT, 2625 N. Meridian St.	$4.00-$6.00	$6.50-$10.00	$6.50- $9.00
SEVERIN, 201 S. Illinois St.	$3.00-$5.00	$4.50- $7.00	$6.50-$10.00
SPINK-ARMS, 410 N. Meridian St.	$3.00-$6.00	$5.00-$12.00	$5.50-$12.00
WARREN, 123 S. Illinois St.	$3.25-$6.00	$4.50- $7.50	$6.50- $8.25
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You are requested to reserve the following accommodations during the period of the Annual Meeting of the Indiana State Medical Association, October 26, 27 and 28, or for such other period as may be indicated herein.

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News Notes

Dr. James T. Oswalt, of Indianapolis, opened offices recently in Mitchell, for the practice of medicine. A graduate of the University of Arkansas School of Medicine, in 1939, he interned at the Ball Memorial Hospital, in Muncie, and practiced for two years at Dunkirk. Doctor Oswalt served for four years in the Army, most of his tour of duty being spent in the Southwest Pacific. Following his release from service, he served at Billings General Hospital, in Indianapolis.

Announcement has been made of the marriage of Dr. Eleanor Alice Steele, of Philadelphia, to Dr. Brandt F. Steele, formerly of Indianapolis, in Philadelphia, on April twenty-fifth.

Dr. W. H. Sewell, of Jackson, Kentucky, has taken over the practice of Dr. R. J. Morrical, at Wolcott. Doctor Morrical has moved to Logansport. Doctor Sewell graduated from the University of Louisville School of Medicine, and served his internship at the St. Joseph Hospital, in Lexington, Kentucky, before entering military service. He was separated from service in December 1947.

Dr. J. V. Thompson, of Indianapolis, was guest speaker at the Jay County Tuberculosis Association, at Pennville, on April twenty-sixth. His subject was "Surgery of Tuberculosis."

Dr. John B. Terveer has opened an office for the general practice of medicine in Decatur.

Dr. Wallace E. Bash has opened an office at 111 Esmond Street, in Fort Wayne, for the practice of medicine, after completing a two-year residency in pediatrics at the Indiana University Medical Center. Doctor Bash is a native of Warsaw and a graduate of Indiana University School of Medicine. He was on duty in the Pacific Theater with the U. S. Army Medical Corps for two years.

The completion of fifty years of medical practice was celebrated on March twenty-eighth by Dr. S. B. Montgomery, of Cynthiana. He began his practice in Poseyville on March 28, 1898. In the spring of 1899 he moved to Wendel, where he practiced for three years, and in 1902 moved to Cynthiana, where he has practiced ever since. He is in active practice at the present time.

Two Indianapolis physicians were successful in the primary elections May 4. Dr. Walter F. Kelly was nominated for the state senate on the Democratic ticket, and Dr. Clark W. Day was nominated for the Indiana house of representatives by the Republican party.

Dr. L. D. Borough, formerly of Fort Worth, Texas, has opened an office in the J.M.S. Building in South Bend for the practice of psychiatry and neurology. A graduate of Indiana University School of medicine, Doctor Borough took a residency in psychiatry in Buffalo, New York. Following this, he spent five years in the Army. Upon his separation from service, he spent one year at the Neurological Institute at the Presbyterian Medical Center in New York City. He then practiced for a short time in Fort Worth.

Dr. Claude D. Holmes, Jr., has joined his father in the practice of medicine in Frankfort. A former captain in the Army, Doctor Holmes graduated from the Indiana University School of Medicine in 1944, and after his internship, he took resident training in orthopedic surgery at the Indiana University Medical Center.

Dr. Fred W. Grayston, of Huntington, was honored for his fifty-three years of service in the medical profession at a dinner meeting of members of the Huntington County Medical Society on May fourth.

Dr. Kenneth R. Wooling, of Indianapolis, is now taking a residency in medicine at the Mayo Clinic, where he plans to be for approximately three years.

Out of the Army for only a few months, Dr. William A. Koontz, of Indianapolis, has transferred his membership to Grant County, where he will be in general practice in Gas City.

Newly elected officers of the Indiana Advisory Health Council of the Indiana State Board of Health are: Chairman, M. A. Auerbach, of Indianapolis; vice-chairman, Mrs. W. H. Lykins, Covington; and secretary, Dr. Walter L. Portteus, of Franklin.

Dr. Philip W. Hedrick has opened an office for the practice of pediatrics at 654 East 54th Street, in Indianapolis. A graduate of Indiana University School of Medicine in 1941, Doctor Hedrick spent forty-four months in the Army, approximately twenty-two months of which were spent in the Pacific. He spent sixteen months in postgraduate training at St. Lukes and Willard Parker hospitals in New York, and nine months at the Riley Hospital in Indianapolis.



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—radiography—

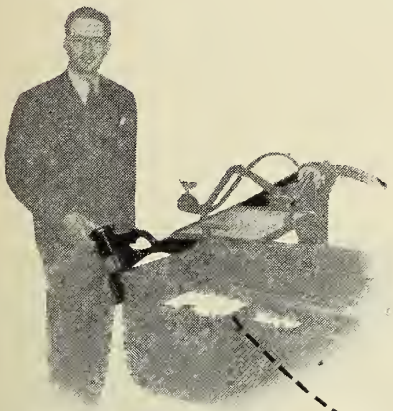


To bring the tube head under the table, simply release the lock-lever.

As you can see here, there's nothing to converting the Picker "Century" single-tube x-ray unit from the *radiographic* to the *fluoroscopic* position. The tube arm is an integral part of the table itself, perfectly counterbalanced through a travel

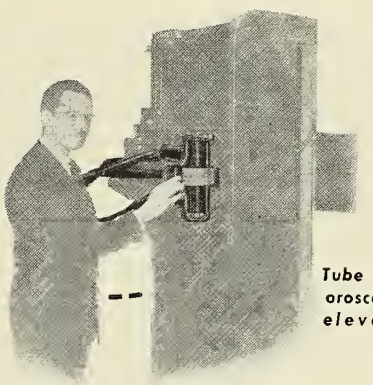
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range extending the entire table length. The table is easily tilted, and locks automatically in any of four standard angulations (horizontal, vertical, Trendelenburg and Fowler) offering unparalleled flexibility for radiographic positioning.



Tube head passing end of table with ample clearance.

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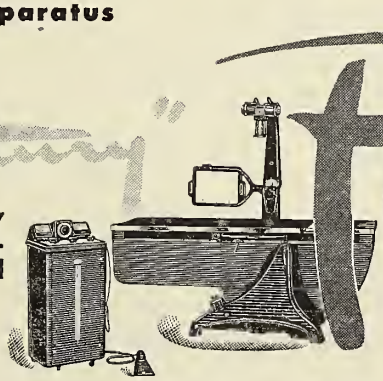


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The Chicago Medical Society is offering physicians of the country two postgraduate courses in September. A course in Hematology and Neurology will be given September 13-18 and another, in Cardiovascular and Respiratory Diseases, will be given September 20-25, 1948. The sessions will be held in Thorne Hall on Northwestern University Medical School campus. An outstanding group of teachers from all sections of the United States will make up the faculty. Information may be secured by writing the Chairman, Committee on Postgraduate Medical Education, Chicago Medical Society, 30 North Michigan Avenue, Chicago 2, Illinois.

The Areal Meeting of the **American Academy of Pediatrics** will be held at the Hotel Schroeder, Milwaukee, Wisconsin, June 28-30, 1948. Members of state medical societies are welcome to attend. The registration fee will be $5.00 for such nonmembers, together with a $5.00 registration for which each registrant receives a ticket to the banquet, making a total registration fee of $10.00. Registration may be made by writing to Dr. C. G. Grulee, Secretary-Treasurer, American Academy of Pediatrics, 636 Church Street, Evanston, Illinois, enclosing a check for $10.00, or registration may be made at the time of the meeting.

Dr. Carl H. McCaskey, of Indianapolis, was a speaker on the scientific program of the Illinois Medical Association, at its annual meeting in Chicago, May 10-12. He presented a paper before the General Assembly on "The Significance of Hoarseness." He also presented a paper before the Section on Eye, Ear, Nose and Throat, on "Some Phases of Nasal Physiology."

The Oklahoma State Medical Association is sponsoring a post-A.M.A.-convention tour for its members, and has invited members of the Indiana State Medical Association to join them.

This thirteen-day all-expense tour starts from Chicago on Friday, June 25, at 1:15 P.M., at the close of the A.M.A. convention. It will include visits to Jasper National Park, Columbia Icefield, Lake Louise, Banff, and one day at the Calgary Stampede, before returning to Chicago on July 7. The tour will be on a special train. For further information, write to Mr. Dick Graham, Executive Secretary of the Oklahoma State Medical Association, 210 Plaza Court, Oklahoma City, Oklahoma.

Dr. Kenneth L. Craft, of Indianapolis, was a participant in a panel discussion on "The Relation of Allergy to Otolaryngology," at the annual meeting of the American College of Allergists held in New York in March.

Limiting his practice to ophthalmology, Dr. C. J. Aucreman has opened an office in Winchester. He had practiced in Montpelier for four years before entering the Army, where he served for five years, seeing active duty in the South Pacific theater. Following his separation from service, Doctor Aucreman completed two years of postgraduate study in St. Louis and Cleveland.

Dr. Robert W. Boswell has opened an office for the general practice of medicine at 2005 W. Franklin Street, in Evansville. A graduate of the Indiana University School of Medicine in 1944, he served an internship and a residency in Hammond, before entering the Army. Doctor Boswell served for twenty-four months, twenty-one of which were overseas.

Dr. Don F. Cameron, of Fort Wayne, was elected president of the Northern Tri-State Medical Association, when they met recently in Findlay, Ohio. Dr. L. P. Harshman, of Fort Wayne, was named a member of the board of directors.

Dr. E. H. Carleton, of East Chicago, was elected first vice-president of the American Association of Industrial Physicians and Surgeons at their convention in Boston in April.

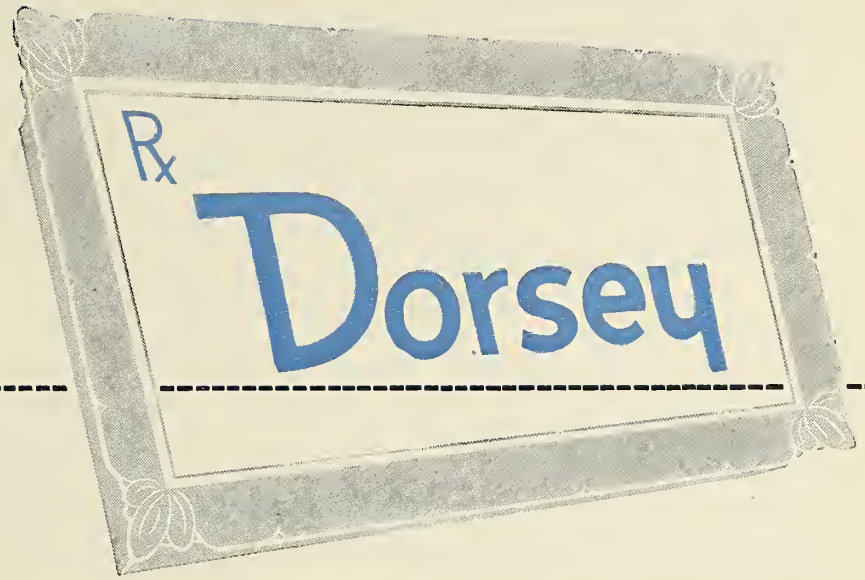
Announcement has been made by Dr. Robert D. Dodd of the opening of an office in Culver for the general practice of medicine. A native of South Bend, and a graduate of Indiana University School of Medicine, Doctor Dodd served his internship at Memorial Hospital in South Bend. Following this he was in the Army for two years, after which he was on the staff of the Methodist Hospital in Peoria, Illinois.

Dr. Maxwell H. Dale has opened an office for the practice of surgery at 818 grand Avenue, in Connersville. Prior to coming to Connersville, Doctor Dale practiced in New York City, where he was also connected with Columbia University as an instructor of surgery. During the war he served as flight surgeon with the 5th Air Force in the South Pacific. He was in service for four years and held the rank of major.

Dr. Frank D. Hogle, of Plymouth, has accepted an appointment on the staff of the Logansport State Hospital. He began his service at the hospital on May first.

Dr. Pierce MacKenzie, of Evansville, has been appointed commanding officer of Volunteer Medical Reserve Division 9-29, by Rear Admiral Frederick L. Conklin, Ninth Naval district medical officer.

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NATIONAL CONFERENCE OF COUNTY MEDICAL SOCIETY OFFICERS

Indiana physicians are invited to attend the third National Conference of County Medical Society Officers in the Palmer House, Chicago, on Sunday, June 20, which is the day preceding the opening of the 1948 annual session of the American Medical Association.

Dr. A. M. Mitchell of Terre Haute is chairman of the conference and will preside.

"The Job of the County Medical Society" will be the subject of the conference, to which county medical society officers throughout the United States have been invited. Each officer present will be free to enter into the discussion and express his thoughts.

The program follows:

9:30 a. m.—Registration
Call to Order: A. M. MITCHELL, M.D., Chairman, Terre Haute, Indiana
Address of Welcome: E. L. HENDERSON, M.D., Chairman, Board of Trustees, A. M. A., Louisville, Kentucky
10:00 a. m.—I. THE COUNTY MEDICAL SOCIETY—ITS PART IN MEDICAL ORGANIZATION
A. Relation to the State Medical Association
B. Relation to the American Medical Association
C. Relation to Other Medical Organizations—N.P.C., A.A.P.S., Blue Cross, A.M.C.P., Academy of General Practice, etc.
Discussant: F. J. HOLROYD, M.D., Princeton, West Virginia
Question and Answer Period
11:00 a. m.—II. THE COUNTY MEDICAL SOCIETY—ITS RESPONSIBILITY TO THE MEMBERSHIP
A. Organization Responsibilities
1. Membership—Selection and Maintenance
2. Censorship—Maintaining Ethics
3. Hospital Relations
Discussant: T. J. DANAHER, M.D., Torrington, Connecticut
B. Scientific Programming
Discussant: C. J. MILLING, M. D., Columbia, South Carolina
C. Fellowship and Business
1. Social Functions—Golf, Bowling, Parties
2. Business Aids—Credit and Collection, Telephone Answering Service, etc.
Discussant: C. L. MULFINGER, M.D., Los Angeles, California
Question and Answer Period
12:30 p. m.—Luncheon (Subscription)
Prominent Speaker on "National Medical Emergency"
2:00 p. m.—III. THE COUNTY MEDICAL SOCIETY—ITS RESPONSIBILITY TO THE PUBLIC
A. Medical Care—Serving the Public
1. Pay Patients
2. Medically Indigent
3. Indigent—Government Clients
Discussant: D. B. WILEY, M.D., Utica, Michigan
B. Community Agencies
1. Special Programs—Participation in Cancer, Tuberculosis, Heart, etc. programs
2. Community Chest—The Place of the Medical Profession in the Drives for Funds
3. Health Councils—The Function of the Medical Society
Discussant: B. O. MARK, JR., M.D., Worthington, Minnesota
C. Newspapers, Radio, Industry, and Labor
Discussant: W. ANDREW BUNTEN, M.D., Cheyenne, Wyoming
D. Legislative-Political Responsibilities of the County Medical Society
Discussant: R. B. ROBINS, M.D., Camden, Arkansas
Question and Answer Period

INDIANA SOCIAL HYGIENE ASSOCIATION

Dr. A. F. Weyerbacher of Indianapolis, treasurer of the Indiana State Medical Association, was honored last month by being elected president of the newly-organized Indiana Social Hygiene Association.

Mrs. A. W. Ratcliffe of Evansville, immediate past president of the Woman's Auxiliary to the state medical association, was named secretary. Other officers are Paul Johnson of Delphi, vice-president, and Harold B. West of Indianapolis, treasurer.

The association has established offices at 1220 Security Trust Building in Indianapolis, sharing space with the Indiana Tuberculosis Association. Mrs. Dorothy F. Buschmann, field representative, is in charge.

Groups or units will be organized in each county to carry out the association's program. The six-point purpose of the association, as set out in the constitution, is as follows:

1. To promote a broad program of personal and family life education designed to give young people high standards of responsibility in social attitudes and behavior, and a preparation for marriage, parenthood and family life based on understanding of human relations.

2. To cooperate with the health agencies and the medical profession in the eradication of syphilis, gonorrhea and the other venereal diseases through programs aimed at preventing new infections.

3. To promote community environment favorable to family life, and to safeguard children and adolescents from conditions leading to sex delinquency, including provision for wise use of leisure time and adequate wholesome recreation.

4. To encourage sound state laws for protection from syphilis through recognized medical procedures.

5. To combat prostitution and work toward the enforcement of laws for the protection of the individual and of the community against the physical, emotional, economic and social hazards arising therefrom.

6. To promote public understanding and support of social hygiene by such measures or activities as shall appear expedient.

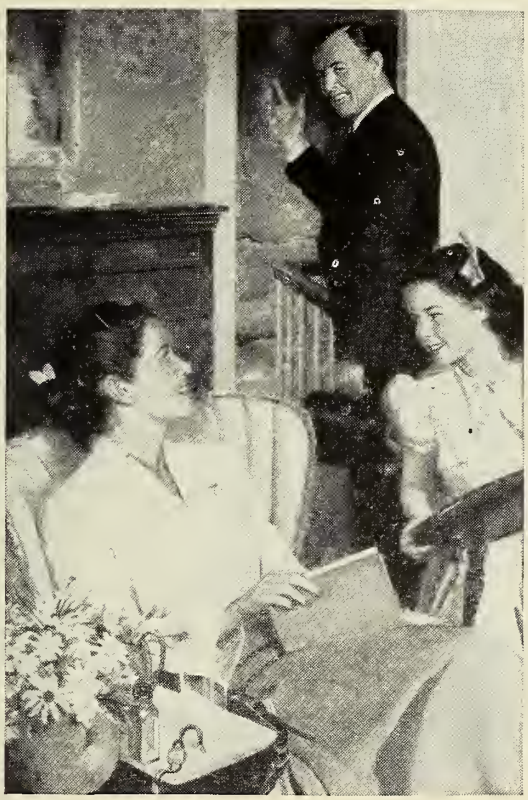
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Some things you should know about being a good patient

No. 212 in a series of messages from Parke, Davis & Co. on the importance of prompt and proper medical care.



FOR your own sake, as well as your doctor's it is vitally important to be a "good patient."

Often it is your co-operation with your doctor that makes the difference between an early recovery and a late one, between a minor illness and a serious one.

Here are some of the ways you can help your doctor, and yourself:

1. If you feel sick, call your doctor at once. Don't wait for a serious illness to develop before you ask his help. The sooner he sees you, the more he can do to help you avoid a major illness.

2. Before you telephone your doctor, make a list of the questions you want to ask him. Have a paper and a pencil handy when you call, so that you may take down his instructions. This way you will save your doctor's time, and remember *accurately* what he tells you.

3. Answer your doctor's questions *fully*. A previous illness may not seem to you to have any bearing on your present condition. But to your doctor it might furnish a valuable clue. Tell him complete facts. Let *him* decide what is important.

4. Follow your doctor's instructions *exactly*. If he prescribes medicine, take it *according to directions*. Remember, a larger dose than that prescribed won't cure you faster. And it might be harmful.

5. Never use medicine prescribed for somebody else, or for a previous illness of your own. However similar your symptoms may appear to you, the nature of your illness may be quite different. Only your doctor can accurately diagnose your trouble and prescribe proper treatment.

6. If your doctor advises an operation, don't put it off. With modern surgery, modern hospital care, you seldom have reason to fear an operation.

7. The new medical treatments you read about in the popular press aren't likely to be news to your doctor. If your doctor has not recommended a new treatment to you, it is probably because there are still some questions about its value, some limitations not stressed in popular reports, or some factors in your case which would make the treatment undesirable or ineffective for *you*.

8. Don't ask your doctor to advise you about members of your family whom he himself has not seen. He cannot risk giving an opinion about a patient of whose condition he has no firsthand knowledge.

Makers of medicines prescribed by physicians

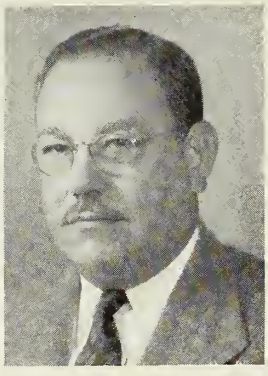
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Deaths

Maurice R. Lohman, M.D., prominent surgeon of Fort Wayne, died on April thirtieth, at the age of fifty-eight, following an illness of several months. Doctor Lohman had been president of the Allen County Tuberculosis Association for fifteen years, and was a member of the board of directors of the Irene Byron Tuberculosis Sanatorium. Always active in state association work, he was a delegate from Allen County from 1934 to 1945, inclusive, and had served on numerous committees, from 1936 until the time of his death. A graduate of the University of Michigan Medical School, in 1916, he had practiced in Fort Wayne since that time. He was a member and former president of the Fort Wayne (Allen) County Medical Society, a member of the Indiana State Medical Association, and a Fellow of the American Medical Association. He was also a member of the board of governors of the Mississippi Valley Tuberculosis Association, a member of the Tri-State Medical Society and the Indiana State Tuberculosis Association.



Dr. M. R. Lohman

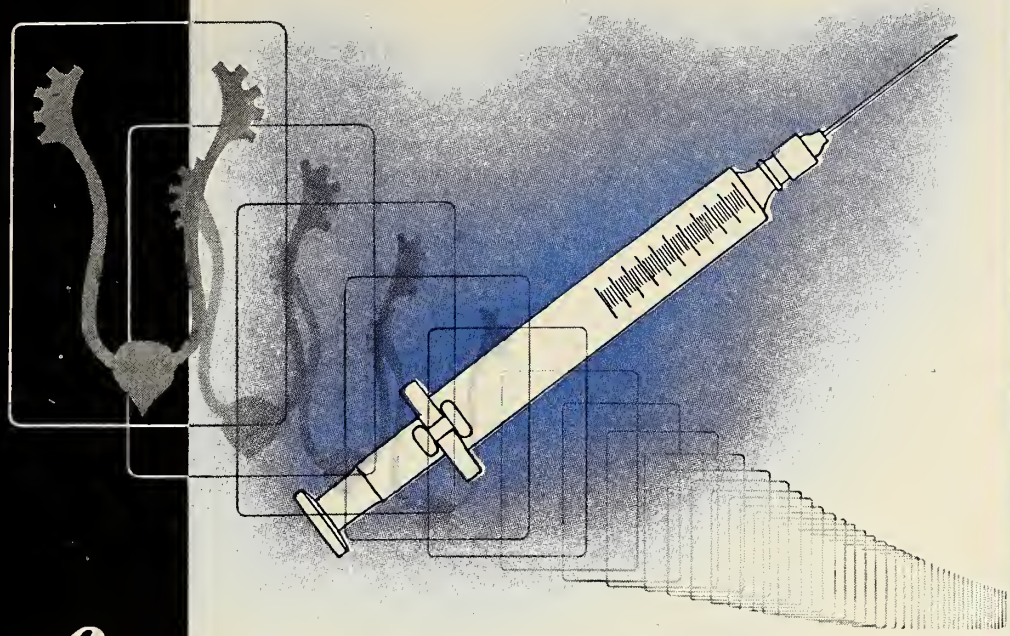
Carl V. Davisson, M.D., of Williamsport, died on April seventh, after an extended illness. He was sixty-seven years of age. A graduate of Indiana University School of Medicine in 1908, Doctor Davisson practiced in Lafayette until 1941, when he moved to Williamsport, where he has maintained a practice until approximately one month ago. A veteran of World War I, he was a member of the Fountain-Warren County Medical Society and the Indiana State Medical Association, and was a Fellow of the American Medical Association.

Cova R. Graham, M.D., of Bourbon, died on April third, after an illness of approximately one year. He was sixty-one years of age. He was a graduate of the University of Louisville School of Medicine, in 1910. He began the practice of medicine in Bryant, but moved to Bourbon in 1919, where he was actively engaged in practice until he became ill in April 1947. He was a member of the Marshall County Medical Society, the Indiana State Medical Association, and the American Medical Association.

Leonard J. Ostrowski, M.D., of East Chicago, died suddenly on March twenty-eighth, while vacationing in Arizona. He was sixty-two years of age. He was a graduate of the University of Illinois College of Medicine, in 1912, and had practiced medicine in East Chicago since 1916. He was a member of the Lake County Medical Society, the Indiana State Medical Association, and the American Medical Association.

Francis M. Reynolds, M.D., of Montpelier, died on April sixteenth, after a long illness. He had practiced in Montpelier for more than half a century. He was seventy-eight years of age. Doctor Reynolds graduated from the Medical College of Indiana, in Indianapolis, in 1897, and was a former member of Wells County Medical Society and the Indiana State Medical Association, and a former Fellow of the American Medical Association.

Willard W. Swarts, M.D., retired physician of Auburn, died at his home in Three Rivers, Michigan, on April twenty-fourth. He had been seriously ill for several years. He was seventy-six years of age. After graduating from the Medical College of Ohio, in Cincinnati, in 1896, Doctor Swarts began the practice of medicine in Poe. In 1900, he moved to Auburn, where he continued to practice until illness forced his retirement. Doctor Swarts was an honorary member of the DeKalb County Medical Society and the Indiana State Medical Association, and was a Fellow of the American Medical Association.



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Society Reports

INDIANA STATE MEDICAL ASSOCIATION

EXECUTIVE COMMITTEE

May 9, 1948.

Roll call showed the following present: C. H. McCaskey, M.D., chairman; Walter L. Portteus, M.D.; Cleon A. Nafe, M.D.; A. P. Hauss, M.D.; Alfred Ellison, M.D.; A. F. Weyerbacher, M.D.; Albert Stump, attorney, and Ray E. Smith, executive secretary.

Guests: Miss Lucy Shuler, chairman, Legislative Committee, Woman's Auxiliary to Indiana State Medical Association; Mrs. Charles F. Voyles, Woman's Auxiliary; Charles F. Thompson, M.D., chairman, and Glen Ward Lee, M.D., member of the Committee on Veterans Affairs and Rehabilitation.

Membership Report

Number of members May 8, 1948	3,514*
Number of members May 8, 1947	3,451
Gain over last year	63
Number of members Dec. 31, 1947	3,618

* Includes 52 in military service (gratis), 172 honorary members.

1948 Annual Session, Indianapolis, October 26, 27 and 28, 1948

Badges. On motion of Drs. Ellison and Portteus the state headquarters office was assigned the responsibility of selecting a design and purchasing badges.

Scientific exhibit award. The question of a suitable scientific exhibit award was referred to the Committee on Scientific Exhibit for suggestions to be presented to the Executive Committee at its next meeting.

The president reported on decisions made at a meeting of the local Committee on Convention Arrangements.

Statements of receipts and expenditures for April for the association and THE JOURNAL were approved.

1949 Annual Session, Indianapolis

Centennial stickers. The committee approved the use of stickers to promote the centennial session and referred the question of design to the Centennial Committee.

1950 Annual Session

The executive secretary reported that pending action of the House of Delegates in October, tentative dates of September 26, 27 and 28, 1950, had been reserved at the French Lick Springs Hotel.

Legislative Matters

National

Report on National Health Assembly, Washington, D. C. The president-elect of the association attended the National Health Assembly and on motion of Drs. Nafe and Portteus, he was commended for a most excellent report on this meeting.

Telegram sent to chairman of the Medical Service Committee of the recent National Health Assembly by the Committee on Public Policy and Legislation of the association was read.

The executive secretary was directed to write a letter to Dr. Floyd T. Romberger commending him for the excellent article which he wrote in opposition to compulsory health insurance and which was carried in the April issue of *Purdue Scientist.*

Local

The executive secretary reported that five physicians were candidates for the legislature in the recent primary and one was nominated for the Senate and one for the House of Representatives from Marion county.

Organization Matters

Fifty-Year Club.

a. The executive headquarters was directed to make lists of the physicians eligible to this club and send them to the secretaries of the county medical societies for their use in designating the recipients of this award.

b. A brochure of the fifty-year club members of the Medical Society of the State of New York was noted.

General practitioner award. The president, treasurer and executive secretary were designated as a committee to draft a suitable certificate and to decide upon a gift which will be presented to the physician voted as the general practitioner of 1948 by the House of Delegates in October.

Compulsory attendance at medical meetings. Letter from the Indianapolis Medical Society, including a resolution adopted on April 27 instructing the Indiana delegates to the A.M.A. house of delegates to introduce measures disapproving compulsory attendance at medical meetings, was read. On motion of Drs. Nafe and Weyerbacher the executive secretary was directed to write the Indianapolis Medical Society to the effect that such procedure is out of order and that this resolution should be presented by the Marion county delegates to the Indiana House of Delegates for decision as to whether or not such instructions should be given to the delegates to the A.M.A.

"Save the Shades." Letter received from the Governor, thanking the association for publishing an article on "Save the Shades" campaign in the May issue of THE JOURNAL, was read.

Telegram of condolence to the family of the late Dr. A. B. Graham and acknowledgment were read.

Affiliate Fellowship in American Medical Associ-

(Continued on Page 648)


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(Continued from Page 646)

ation. On motion of Drs. Nafe and Ellison, Dr. Ada E. Schweitzer and Dr. H. B. Shacklett were nominated for election to Affiliate Fellowship in the A.M.A.

Protest against report of Committee for Improvement of Child Health of the American Academy of Pediatrics. On motion of Drs. Nafe and Ellison the Executive Committee went on record against the recommendations made by this committee, and the executive secretary was instructed to convey the opposition of the committee to the American Academy of Pediatrics.

Medical Economics

Proposed merger of Associated Medical Care Plans and Blue Cross. The president and Dr. Walter L. Portteus were directed to attend a meeting called by the Council on Medical Service of the American Medical Association to discuss the proposed merger of A.M.C.P. and Blue Cross and the development of a national insurance company, in Chicago on June 19, 1948.

Indiana Cancer Program

It was agreed to ask the chairman of the Committee on Cancer to make a report on the establishment of cancer diagnostic centers at the next meeting of the Executive Committee.

Veterans Affairs

A member of the Committee on Veterans Affairs and Rehabilitation reported on the recent called meeting of the Council on National Emergency Medical Service of the American Medical Association, after which, on motion of Drs. Hauss and Ellison, the president was authorized to appoint an Indiana Committee on National Emergency Medical Service to cooperate with the National Council in preparing for emergency service in the event of war.

Woman's Auxiliary

The 1948-1949 chairman of the Legislative Committee of the Woman's Auxiliary to the Indiana State Medical Association appeared before the committee to discuss work of her committee for the coming year. It was agreed that all legislative committees of the Woman's Auxiliary should work directly under the advisory committees of the county medical societies, and that bulletins sent out by the state chairman should be submitted to state headquarters for approval before mailing.

Mrs. Charles F. Voyles appeared before the committee as a representative of the president of the Woman's Auxiliary. Permission was given to exhibit posters, maps, pamphlets and articles on health subjects and in opposition to socialized medicine and to suggest that *Hygeia* be adopted by the state for use in public schools.

Distribution of an article on the centennial of the American Medical Association, written by Miss Lena Shannon of Kokomo, was referred to the Committee on Publicity for approval.

Labor Union Affairs

A news release, issued by the UAW-CIO Public Relations Department, naming a committee appointed to administer the union's five-cents-for-health drive, was read and discussed.

A letter from the Chapel of the American Medical Journal print shop, protesting the differences with the management, was noted.

Nurse Recruitment Program

On motion of Drs. Weyerbacher and Ellison, the headquarters office was directed to send portfolios of advertising for use in nurse recruitment program to each county medical society with the suggestion that the societies consider sponsoring one or more advertisements in their local newspapers.

The Journal

Report on advertising:

Increase, April and May	$ 178.60
Decrease	19.20
Total increase, April and May	$ 159.40
Total increase for year	$1,282.98

Letter received from the Indianapolis Medical Society protesting the editorial, "A Bit More Re the Kickback," in the April issue of THE JOURNAL was read.

On motion of Drs. Portteus and Ellison, the request of the Medical School of the University of Utah for a complimentary subscription to THE JOURNAL was granted.

Medical Defense

Letter from United States District Attorney Alex M. Campbell, thanking the association attorney for his assistance in the prosecution of the Kaadt case in Federal Court, was read.

There being no further business, the committee adjourned to meet again at 10 a.m., daylight saving time, Sunday, June 13, 1948, at the Columbia Club.

COMMITTEE ON PUBLICITY

April 2, 1948

Present: Homer G. Hamer, M.D., chairman; James O. Ritchey, M.D.; Cleon A. Nafe, M.D., and Ray E. Smith, executive secretary.

The following "Hints on Health" news releases were approved:

Week of May 3, 1948—"Tetanus or Lockjaw."
Week of May 10, 1948—"Mental Illness."
Week of May 17, 1948—"Glaucoma."

A suggested news release presenting the doctors' side of the "I-Can't-Get-a-Doctor" story was referred to the Council.

An article in *The Kokomo Tribune*, suggested by the Howard County Medical Society, telling the doctors' side of the public's complaint about physicians not making night calls, was read.

(Continued on Page 650)



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(Continued from Page 648)

An invitation for Indiana to attend a Work Shop on Health Education at Columbus, Ohio, on May 1 and 2, 1948, was read.

The committee ordered reprints of the advertisement, "The Rebellion of the British Doctors," appearing in the April issue of *The Indiana Publisher*, mailed to all county medical society secretaries.

Letter from the President of the Woman's Auxiliary to the state association asking discontinuance of the auxiliary radio program on a commercial basis was read.

The secretary explained a policy of answering questions on medical subjects which has been inaugurated by the Lake County Medical Society in connection with health columns appearing in Hammond and Gary newspapers.

Speaker provided as follows:

April 22, 1948—Lions Club Ladies Night program, Swayzee.

COMMITTEE ON PUBLICITY

April 16, 1948

Present: Homer G. Hamer, M.D., chairman; Marlow W. Manion, M.D.; Cleon A. Nafe, M.D., and Ray E. Smith, executive secretary.

The following "Hints on Health" columns were approved for release:

Week of May 31, 1948—"Acute Gout."

Week of June 7, 1948—"Diarrhea in Babies."

The committee decided to offer the Woman's Auxiliary Radio Committee use of its fifteen-minute radio period of May 15, 22, or 29, 1948, the exact date to be selected by the women.

The designation of the Executive Committee as the Advisory Committee to the Woman's Auxiliary instead of the Committee on Publicity, by the Executive Committee on April 3, 1948, was reported by the executive secretary.

The committee voted to buy a hundred copies of "What Price Security?", issued by the Indianapolis Accident and Health Club. The booklets are to be distributed with other literature against the Wagner-Murray-Dingell bill now before Congress.

Letter from Dr. Samuel W. Weaver, of Santa Ana, California, pointing out the untruthfulness of a newspaper article which said that Santa Ana police and firemen could not get a doctor for an emergency late one night, was read.

COUNCILOR DISTRICT MEETINGS

SIXTH DISTRICT

Officers were re-elected and Greenfield was chosen as the 1949 meeting city at the Sixth District Medical Society session held in Shelbyville May 12.

The officers, all of whom will serve for three years, are: Dr. Will Thompson, Liberty, president; Dr. C. E. Canaday, New Castle, vice-president, and Dr. Robert W. Kuhn, Wilkinson, secretary-treasurer.

The program opened with an address of welcome by Dr. V. Brown Scott, Shelbyville, president of the Shelby County Medical Society, and a review of state and district activities by the councilor, Dr. Walter U. Kennedy, New Castle. Dr. William Niles Wishard, Jr., Indianapolis, presented a paper on "Everyday Urologic Symptoms and What They May Mean," and Dr. N. P. Sullivan, Indianapolis, discussed "Modern Antibiotic Therapy."

Speakers at the luncheon were Dr. Cleon A. Nafe, Indianapolis, president of the Indiana State Medical Association, who talked on "Medical Public Relations," and Ray E. Smith, Indianapolis, executive secretary of the state association.

The afternoon program consisted of the following lectures: "Common Lesions of the Mouth," by Dr. Russell A. Sage, Indianapolis; "Precancerous Lesions of the Breast," by Dr. Max Cutler, Chicago, and "Office Gynecology," by Dr. Walter J. Reich, Chicago.

Dr. Norman F. Richard, Shelbyville, was chairman of the local committee on arrangements.

NINTH DISTRICT

Dr. George H. Warne of Tipton was elected president, and Dr. George Compton, also of Tipton, was elected secretary of the Ninth District Medical Society at the meeting at Frankfort on May 13. Tipton was selected for the 1949 meeting place.

A resolution calling for a state law requiring the immunization of children for smallpox, diphtheria and whooping cough was presented by the Tippecanoe County Medical Society and was adopted.

After a welcome speech by Dr. J. A. Van Kirk of Frankfort, president of the Clinton County Medical Society, and a response by Dr. Wemple Dodds of Crawfordsville, councilor, the following scientific program was presented: "Hypertension," by Dr. James D. Pierce, "Treatment of the Common Skin Diseases," by Dr. Frank M. Gastineau, and "Treatment of Dysphagia," by Dr. J. Stanley Battersby, all of Indianapolis.

The ladies were entertained at luncheon-bridge at the home of Mrs. F. A. Beardsley. Among distinguished guests were Mrs. William R. Morrison of Kokomo, president of the state Woman's Auxiliary, and Mrs. Gastineau, a past president of the auxiliary. A Clinton County unit of the auxiliary was organized.

(Continued on Page 652)

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(Continued from Page 650)

Speakers at the banquet were Dr. Cleon A. Nafe of Indianapolis, president of the Indiana State Medical Association; Dr. Floyd T. Romberger of Lafayette, immediate past president of the association; Ray E. Smith of Indianapolis, executive secretary, and Professor Theodore Gronert of Wabash College. Three members of the state Fifty Year Club were introduced: Dr. Thomas L. Cooksey of Crawfordsville, Dr. H. W. Greist of Monticello, and Dr. Stephen B. Sims of Frankfort.

Eighteen physicians entered the golf tournament, all of whom won prizes.

TENTH DISTRICT

Approximately two hundred physicians and their wives attended the spring meeting of the Tenth District Medical Society at the Phil Smidt & Son restaurant at Whiting, May 5. Dr. Neal Davis of Lowell, society president, presided.

The program began with a trip through the Lever Brothers Company plant. Nearly a hundred went on the two-hour plant walk and saw how Lux, Lifebuoy, Swan and Breeze soaps and Spry shortening are manufactured. This feature of the meeting was arranged by Dr. E. S. Jones, district program chairman and medical director of the Lever Brothers plant.

Dr. J. Garrot Allen, Chicago, assistant professor of surgery, University of Chicago School of Medicine, spoke on "The Physiological Disturbances Produced by Acute Exposure to Atomic Energy Irradiation," following dinner in the evening.

Guests at the dinner included Drs. Allan K. Harcourt, Emmett B. Lamb and L. W. Spolyar, all of Indianapolis, and all members of the Committee on Industrial Health, and Ray E. Smith, executive secretary of the state medical association.

Dr. Davis announced that the fall meeting would be held at Phil Smidt's on Thursday, October 14, 1948.

COMMITTEE REPORTS

COMMITTEE ON CRIPPLED CHILDREN'S SERVICES

The Indiana State Medical Association's Committee on Crippled Children's Services assembled in the Columbia Club at 11:30 a.m. on Sunday, March 7, 1948. Those present included the chairman, Dr. Wayne Glock of Fort Wayne; Dr. George Garceau, Indianapolis; Dr. Carl D. Martz, Indianapolis; Dr. Robert B. Acker, South Bend; Dr. Joseph C. Lawrence, Evansville; and Dr. F. M. Whisler, Wabash. Dr. Huckleberry of Salem and Dr. Topping of Terre Haute were absent.

Guests at the meeting were Dr. Cleon A. Nafe, President of the Indiana State Medical Association; Mr. Ray E. Smith, Executive Secretary of the Indiana State Medical Association; and Mr. Carl F. King, Administrator of the Division of Services for Crippled Children, State Department of Public Welfare.

The chairman described the duties of the committee as follows:

1. Close liaison with the Crippled Children's Services of the Department of Public Welfare.
2. An advisory relationship to the Division of Special Education of the Department of Public Instruction.
3. Liaison with the Governor's Commission for Handicapped Children.
4. An advisory relationship to voluntary agencies such as the Indiana Society for Crippled Children.

A short discussion of the current program was given by Dr. Martz. This described the historical background of services, the present facilities and personnel available, recent legislation and the operating policy of the division, and very brief statistical summary of recent services.

A report on the survey of handicapped children in Indiana which is now in progress was given by Mr. King. The committee discussed this survey and the following resolutions were adopted by the committee:

1. *Resolved*, That the name of the crippled child may be released to a responsible agency approved by the Governor's Commission for Physically Handicapped Children. Information necessary to the agency (private or public) responsible for his care, may also be released.
   (Motion made and seconded by Drs. Garceau and Whisler.)
2. *Resolved*, That full statistical information shall be made freely available but due care should be exercised to see that it is presented in such a manner that the proper interpretations will be made.
   (Motion made and seconded by Drs. Acker and Lawrence.)

It was the feeling of the committee that the activities of the Governor's commission should be encouraged and that whenever it seemed desirable, the state medical association's committee would be happy to attend a joint meeting with them.

The policy of care under welfare service was then discussed. The present definition of a crippled child as used by the State Department of Public Welfare was deemed satisfactory. The following resolutions were adopted:

1. *Resolved*, That welfare cases closed on account of financial ineligibility be referred back to the family physician for continued care.
   (Motion made and seconded by Drs. Lawrence and Martz.)
2. *Resolved*, That nonindigent service cases at the Indiana University Medical Center hospitals be discontinued.
   (Motion made and seconded by Drs. Garceau and Acker.)

(Continued on Page 654)

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UROLOGY — Intensive Course, Two Weeks, starting September 27.

FRACTURES & TRAUMATIC SURGERY — Intensive Course, Two Weeks, starting June 7, October 25.

OPHTHALMOLOGY — Intensive Course, Two Weeks, starting September 20. Refraction Methods, Four Weeks, starting October 11. Ocular Fundus Diseases, One Week, starting June 7, November 15.

GYNECOLOGY—Intensive Course, Two Weeks, starting September 13. Vaginal Approach to Pelvic Surgery, One Week, starting September 27.

OBSTETRICS Intensive Course, Two Weeks, starting June 21, September 27.

MEDICINE — Intensive Course, Two Weeks, starting October 11. Personal Course in Gastroscopy, Two Weeks, starting June 28, July 12. Electrocardiography & Heart Disease, Two Weeks, starting August 2.

DERMATOLOGY—Formal Course, Two Weeks, starting October 4. Clinical Course every two weeks.

OTOLARYNGOLOGY — Intensive Course, Two Weeks, starting October 18.

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ALSO HOSPITAL EXPENSE FOR MEMBERS, WIVES AND CHILDREN

85c out of each $1.00 gross income used for members' benefit

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(Continued from Page 652)

The medical care of cerebral palsied children and activities in the field of special education were discussed. It was the feeling of the committee that activities in these areas should be under careful surveillance, that high professional standards be maintained and that every effort be made to coordinate the medical care and treatment program of all professional and technical services. It was requested that the president of the state medical association prepare an article for publication in the forthcoming June magazine of the welfare department, presenting the interest and the suggestions of the medical profession on behalf of the medical care and education of physically handicapped children.

The administration of the crippled children's division was discussed by the committee in relation to various proposals of the Children's Bureau, particularly regarding full-time medical supervision. The following resolution was adopted by the committee:

1. *Resolved*, That efficient lay administration with careful medical supervision and consultation by practicing physicians shall be the procedure employed in Indiana's administration of crippled children's services.
(Motion made and seconded by Drs. Garceau and Lawrence.)

The committee commended the present policies and administration of state crippled children's service and expressed a desire to be consulted from time to time on problems concerning the entire field of crippled children's service.

Wayne Glock, M.D.,
Chairman

LOCAL SOCIETY REPORTS

DeKalb County Medical Society members met at Sacred Heart Hospital, in Garrett, on March thirty-first. The fifteen members present held a general discussion.

Another meeting was held on April fourteenth. Eleven members were present at this meeting.

Delaware-Blackford County Medical Society members met in Muncie on April twenty-third to organize a county health council.

Elkhart County Medical Society members held a meeting in Elkhart. The guest speaker was Dr. Lawrence Pomeroy, of Cleveland, who spoke on "Cancer."

Floyd County Medical Society held a meeting in Legion Hall, in New Albany, on March twelfth. Dr. Kenneth Brown, of New Albany, spoke on "Multiple Cerebral Hemorrhages." Eighteen members were present.

At another meeting, on April ninth, Dr. Wilfrid Gettelfinger, of Louisville, Kentucky, was the guest speaker. Eighteen members were in attendance at this meeting.

Fort Wayne (Allen) County Medical Society met at the Chamber of Commerce, in Fort Wayne, on April twentieth. The twenty-three members present held a business meeting.

On May fourth the society was addressed by Dr. D. N. Danforth, of Northwestern University. His subject was "The Treatment of Emergency Bleeding During Pregnancy." Forty-five members attended this meeting.

Gibson County Medical Society members held a meeting on April twelfth at the Hotel Emerson, in Princeton. The nineteen members and guests present heard Dr. W. C. Caldwell, of Evansville, present a paper on "The Recognition and Treatment of Common Endocrine Disturbances Seen in General Practice."

Greene County Medical Society members met at the Freeman Greene County Hospital, in Linton, on April fifteenth. Drs. J. G. S. Weber and L. A. Malone, of Terre Haute, presented "X-ray Subjects." Twenty members were present.

Hamilton County Medical Society members met at Cicero on April thirteenth, when Dr. L. E. Burney, of Indianapolis, spoke to the twenty-one members present on "Functions and Policies of the State Board of Health."

Howard County Medical Society members met in Kokomo on April second. Dr. Charles F. Thompson, of Indianapolis, spoke on "Traumatic Injuries to the Knee." Thirty members were in attendance.

Indianapolis (Marion County) Medical Society members met at the Athenaeum, in Indianapolis, on April sixth. Guest speaker at this meeting was Dr. James Cunningham, director of the Bureau on Mental Health of Connecticut, who spoke on "The Function and Organization of a Child Guidance Clinic."

At another meeting, on April thirteenth, the society was addressed by Mr. Lester H. Perry, executive secretary of the Medical Society of the State of Pennsylvania. His subject was "The Dollars and Sense of Public Relations."

Kosciusko County Medical Society held a meeting in Warsaw, on April sixth. The ten members present heard Dr. M. O. Klingler, of Plymouth, speak on "Acute Cholecystitis."

At another meeting, on May fourth, Dr. Dan L. Urschel, of Mentone, spoke on "Cardiac Decompensation." Ten members were present at this meeting.

(Continued on Page 656)

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J. H. Grimes, M.D., Associate

(Continued from Page 654)

Lake County Medical Society members met on April ninth at the Mercy Hospital, in Gary. Dr. Peter A. Rosi, of Northwestern University Tumor Clinic, spoke on "The Evaluation of Treatment in Cancer of the Rectum."

LaPorte County Medical Society members met at the Rumely Hotel, in LaPorte, on August fifteenth. Guest speaker for the evening was Dr. August F. Daro, of Chicago, whose subject was "Modern Trends in Obstetrics." Mr. Rollis Weesner, executive secretary of the Indiana Cancer Society, also addressed the thirty-six members and guests present, on the work of the American Cancer Society.

Lawrence County Medical Society members held a meeting at Dunn Memorial Hospital in Bedford, on April seventh. "Ringworm of the Scalp" was discussed by Dr. J. W. Jackson, of the Indiana State Board of Health, and by Mr. William P. Allen, of the State Barber Board.

Madison County Medical Society members met in Anderson on April nineteenth, when the thirty-seven members present heard Mr. E. A. Nordholm and Miss Ruth V. Kirk, of the State Board of Medical Registration and Examination, discuss the Medical Practice Act of Indiana.

St. Joseph County Medical Society members met at the Indiana Club, in South Bend, on April thirteenth. Mr. R. Hocking, of the Memorial Hospital, and Miss Mary Walsh, of St. Joseph Hospital, in South Bend, and Mrs. E. Ennis, of St. Joseph Hospital, in Mishawaka, spoke on "Are Hospital Costs Justified?" Seventy-eight members and five guests were present.

At another meeting, in the LaSalle Hotel, in South Bend, on April twenty-eighth, Congressman Robert A. Grant spoke on "Medical Legislation in Washington." One hundred seventeen members attended this meeting.

Tippecanoe County Medical Society members met at Lincoln Lodge, in Lafayette, on April thirteenth. The seventy members present heard Dr. Lloyd E. Harris, of the Mayo Clinic, discuss "Child Health Project."

Tipton County Medical Society members held a meeting on April sixth, at the Elks Lodge in Tipton. Dr. Reuben Craig, of Kokomo, spoke on "Rheumatic Fever."

Wabash County Medical Society members met at the Wabash Country Club on April twenty-first. Dr. J. S. P. Beck, of Fort Wayne, was the guest speaker. He discussed the medical aspects of atomic activity in Nagasaki.

Wayne-Union County Medical Society held a meeting at Reid Memorial Hospital, at Richmond, on April fifteenth. Thirty-one members were present. Dr. Virgil K. Stoelting, of Indianapolis, presented a paper on "Pre-medication for the Patient Undergoing Anesthesia."

WOMAN'S AUXILIARY to the Indiana State Medical Association

President-elect—Mrs. William Morrison, Kokomo.

President-elect—Mrs. Truman Caylor, Bluffton.

Corresponding Secretary—Mrs. Charles Viney, Logansport.

Recording Secretary—Mrs. Henry Bopp, Terre Haute.

Treasurer—Mrs. Wendell Kelly, Anderson.

Press and Publicity—Mrs. F. M. Gastineau, Indianapolis.

The fourth annual session of the House of Delegates of the Woman's Auxiliary to the Indiana State Medical Association was held in Evansville, April 27 and 28. Mrs. A. W. Ratcliffe, state president, presided at all of the meetings, which opened with a dinner at the McCurdy Hotel, attended by 125 delegates and guests. Mrs. Fred Mills was chairman for a bridge party following the dinner.

Wednesday's meeting consisted of reports by state officers, committee chairmen and county presidents. Eighty-seven delegates were present, including presidents of 20 county auxiliaries. Delegates discussed ways of helping in the nurse recruitment program.

The following officers were elected: president-elect, Mrs. Truman Caylor, of Bluffton; first vice-president, Mrs. Lawerence Shinabery, of Fort Wayne; second vice-president, Mrs. George Wagoner, of Delphi, third vice-president, Mrs. P. G. Coultas, of Tell City, fourth vice-president, Mrs. J. W. Baxter, Jr., of New Albany; treasurer, Mrs. Wendell C. Kelly, of Anderson; recording secretary, Mrs. Henry Bopp, of Terre Haute, and corresponding secretary, Mrs. Charles Viney, of Logansport.

In a brief message following her induction as state president Mrs. W. R. Morrison spoke of the "high honor" which had been given her and the "hopes and dreams" which she had for her year in office. She then conducted a short meeting of the new board of directors.

REPORT OF PRESIDENT

Mrs. A. W. Ratcliffe

Today you will hear some very fine reports from officers, chairmen and county presidents. Any report I can make as president of the Woman's Auxiliary to the Indiana State Medical Association must not detract in any way from these. This successful year has been due in a large part to those whose reports follow this and to the efforts of



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hundreds of physician's wives in all counties who have given time and effort to make each project a success. To every one of you and to every auxiliary member in Indiana goes my whole-hearted gratitude. The pride I have in this organization is not expressible.

May I say at this point that I have always been ambitious for this organization? Through the years I have worked in various capacities came the realization that the potentialities of the Woman's Auxiliary working closely with the Indiana State Medical Association are and have been enormous. These factors, added to the knowledge that there was just one year to get across some of those things I'd been hoping for, has perhaps led me at times to act in what may have appeared to many of you to be an unorthodox manner. Let me assure and reassure you that no move has been made by me at any time without consultation with the Bureau of Publicity, or the president or president-elect of the Indiana State Medical Association, or the executive committee of that organization. I have also frequently consulted with the president-elect of the auxiliary and have at all times kept her informed of my activities.

The Indiana State Medical Association has been extremely cooperative and helpful and I feel that because I contacted them so very often by letter, conference or phone, it perhaps has helped our relations with that group. So often have I approached them with an idea, rather timidly at times, which has subsequently been carried out through their ideas and cooperation, better than I felt could have been hoped for. It was with much pleasure that I recently received a letter from Mr. Ray Smith, executive secretary of the Indiana State Medical Association, informing me that at the April meeting of the executive board our advisory committee has been transferred from the Bureau of Publicity to the Executive Committee of the association, "hoping to bring about closer relationship between the two organizations."

Many of the details of this year have already been recorded in the *Hoosier Doctor's Wife* and the Woman's Auxiliary page of THE JOURNAL of the Indiana State Medical Association. Since this publication has been sent to all, it seems unnecessary to outline them here.

While I was unable to attend the convention in Atlantic City, our president-elect and councilor were present to represent Indiana. Since the material from this was readily available, the chief drawback was that I was unable to obtain a national officer for convention or for this House of Delegates to speak to us. I did attend the conference in Chicago in November, and your president-elect was also present.

Throughout the year a total of 17 trips were made to county groups, 18 auxiliaries were visited and 7 new ones were organized by me. Thanks must again be expresed to the many auxiliaries in the northern part of the state who changed meeting dates and combined meetings to fit in with my schedules.

Conservatively, at least a thousand letters and postcards were sent out to presidents of auxiliaries, state officers and chairmen, secretaries of county medical societies, members-at-large, national officers and officers of the Indiana State Medical Association.

Some new ideas were worked out: the School of Instruction at the convention, *The Hoosier Doctor's Wife*, the roster in the annual edition of THE JOURNAL of the Indiana State Medical Association, and the report outline at the end of the year. The worth of these is for you to consider.

The auxiliary was represented by the president at the formation of the Indiana Social Hygiene Association. Also, later in the year, a committee was appointed to study the nursing shortage. Mrs. Otto H. Bakemeier, of Indianapolis, was made chairman. Mrs. Gerald Gustafson, of Indianapolis, a member of this committee, represented the auxiliary on the state committee for nursing enrollment.

After this above paragraph I do want to mention that at the conference in Chicago in November I questioned the fact that the president-elect of the Woman's Auxiliary to the American Medical Association had "represented the auxiliary" at a meeting, since we had been under the impression that we had been prohibited by the constitution from being represented. It was explained that individuals could represent the auxiliary but that the group as a whole could not belong. The organization, for example, could not become a member group of the General Federation of Women's Clubs. I bring this in at this point, even though it has little place in this report, because this organization will be called on more and more to send representatives to committees and boards. To further our public relations and those of the medical profession, we must foster this phase of our activities.

To have been president of the auxiliary is an experience to enjoy for the rest of my life. I heartily recommend the job to everyone. Work, to be sure; time-consuming, heaven's yes; but the deep personal satisfaction of working with such a group makes it all worth-while. Thank you all for this opportunity.

REPORT OF ORGANIZATION CHAIRMAN

Mrs. W. R. Morrison

As chairman of organization, I have carried on frequent correspondence with the president and written several letters to the vice-presidents con-

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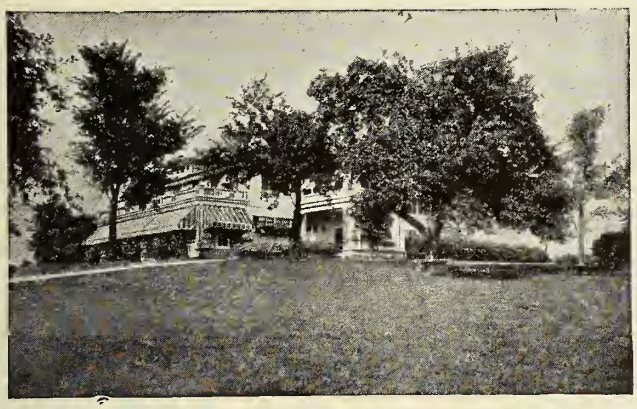
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cerning new members-at-large and the possibility of forming new auxiliaries. I have made several contacts which will, I hope, result in at least two new ones next year. I have sent out over 250 pieces of mail. I attended the organization of Whitley County in October, and of Miami County in April. I attended a committee meeting in June at Indianapolis, national board in December at Chicago, and a meeting of the nomination committee in March. I was present at all the sessions at French Lick last October. I have attended all meetings connected with this House of Delegates. To summarize: We now have nine new auxiliaries, Perry, Whitley, Johnson, Gibson, Montgomery, Wayne-Union, Bartholomew-Brown, Miami, and Morgan. We have 134 members-at-large, with a member in every county. Our membership now is 1,684, an increase of 384 over last year.

REPORT OF HISTORIAN

Mrs. C. D. Ehrman

On September 28, 1948, the Woman's Auxiliary to the Indiana State Medical Association will complete twenty-one years of active work in Educational, Philanthropic and Social Service for the Hoosier State.

It will be a coming of age for this organization, which was founded in Indianapolis in 1927 at a meeting of the Woman's Departmental Club of that city.

The first president was Mrs. Frank Cregor of Indianapolis.

From this beginning of one unit there has grown a mammoth organization of 31 organized auxiliaries covering 37 Indiana counties. A goal has been reached of at least one member-at-large in every county in Indiana.

Under the leadership of active and progressive women the auxiliary has grown steadily through the years and has promoted a lasting influence for good in every county having a chapter.

The programs, arranged by the different county organizations, have stimulated interest among doctors' wives and they have helped to mold public opinion in health education.

All units in the state do some kind of philanthropic work and the members keep abreast of the progress in scientific medicine, are active in all health projects and enjoy many social affairs together.

Doctors always have held an affectionate place in the esteem of humanity. They help at the threshold of life and at its exit. Their wives stand by as a devoted group of women, to help in every way possible and ease the burden of a busy man.

Nothing is as important in shaping the doctor's career as his wife and her interest in his profession. Each year finds new interests for the auxiliary in Indiana and each president has seen the growing importance of this united group of women.

Under the presidency of Mrs. A. W. Ratcliffe, of Evansville, quite a number of new units have been added and several new projects completed.

She has stressed organization throughout the state, and public relations. Her motto has been "Every doctor's wife an auxiliary member."

One of her greatest projects has been the furthering of health education by radio. This has grown into a very worthwhile program and is a great help in homes all over the state, where the radio transcriptions are listened to by a large audience.

At the meeting of the Indiana State Medical Association and the Woman's Auxiliary, held in October, 1947, at French Lick, Mrs. Ratcliffe conducted the first School of Instruction ever held for the auxiliary members. This proved of great interest and value to the wives of the Indiana doctors.

Another project which has attracted state-wide attention and approval is the publication of *The Hoosier Doctor's Wife*, a bulletin for the Woman's Auxiliary to the Indiana State Medical Association. It is being sent to auxiliary members and also to physician's wives in unorganized counties. It gives a place for interchange of ideas and plans for a greater service to members and a help for the state medical association. The first issue was published in July, 1947. This publication will help doctors' wives to be informed intelligently on medical subjects and on all matters relating to the medical profession, as well as all auxiliary business. It will help mold public opinion everywhere.

Along with this state bulletin, Mrs. Ratcliffe has urged that more interest be taken by all auxiliary members in the health magazine, *Hygeia*.

A number of chapters in the state have subscribed for extra copies of this publication and had them placed in schools and libraries. This helps to put health instructions before many citizens who would not learn otherwise of new ideas in health methods.

May the coming years bring even greater advancement of health education throughout Indiana; a better fellowship among physicians' wives, and a continued program of progress in every auxiliary chapter in the state under the approval of the Indiana Medical Association.

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2	James H. Crowder, Sullivan	Dec. 31, 1948
3	William H. Garner, New Albany	Dec. 31, 1949
4	George A. May, Madison	Dec. 31, 1950
5	A. M. Mitchell, Terre Haute	Dec. 31, 1948
6	W. U. Kennedy, New Castle	Dec. 31, 1949
7	Cyrus J. Clark, Indianapolis	Dec. 31, 1950
8	E. H. Clauser, Muncie	Dec. 31, 1948
9	Wemple Dodds, Crawfordsville	Dec. 31, 1949
10	William H. Howard, Hammond	Dec. 31, 1950
11	C. S. Black, Warren	Dec. 31, 1948
12	Paul A. Garber, South Whitley	Dec. 31, 1949
13	Alfred Ellison (Chairman), South Bend	Dec. 31, 1950

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9	George H. Warne, M.D., Tipton	George Compton, M.D., Tipton	Tipton
10	Neal Davis, M.D., Lowell	Frank G. Sink, M.D., Remington	Whiting, October 14
11	W. W. Holmes, M.D., Logansport	O. G. Brubaker, M.D., North Manchester	Kokomo, September 15
12	Benjamin F. Pence, M.D., Columbia City	Karl M. Beierlein, M.D., Fort Wayne	
13	A. A. Thompson, M.D., Tyner	O. E. Wilson, M.D., Elkhart	South Bend, Nov. 10

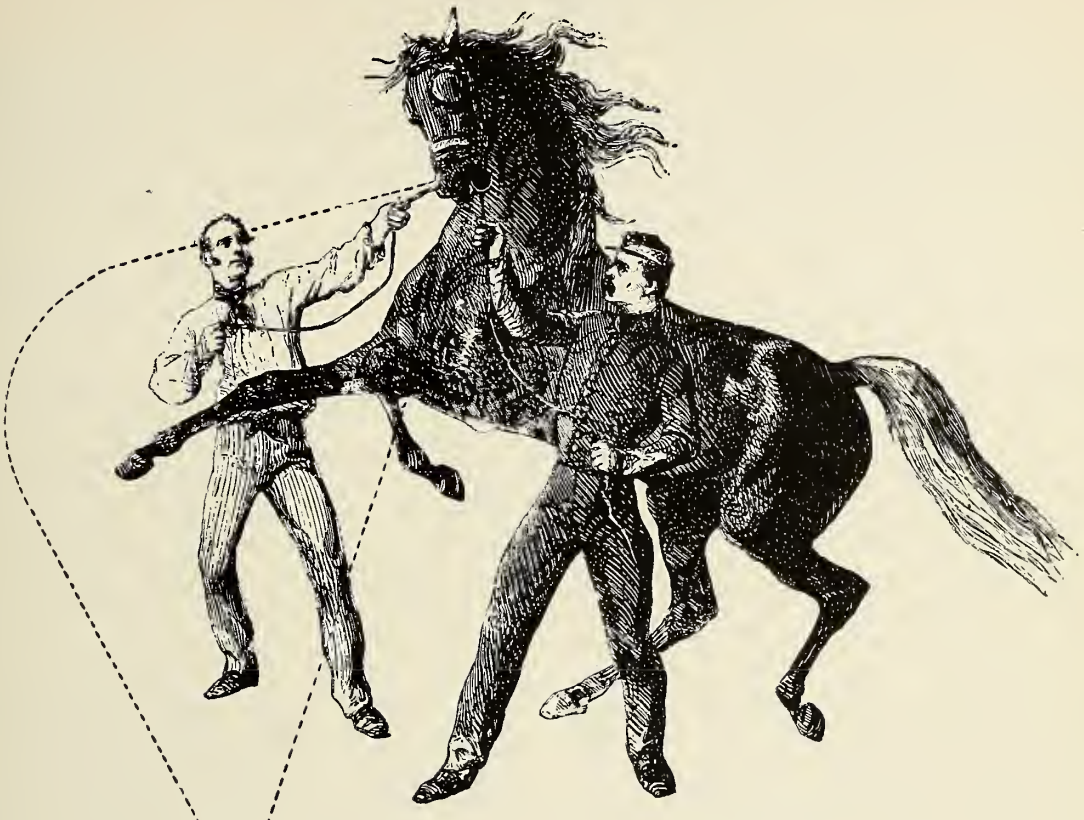
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RECENT DEVELOPMENTS IN THE TREATMENT OF BRUCELLOSIS*

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MENTONE

BRUCELLOSIS is a subject far too complicated to cover in a short period. For this reason I intend to confine my remarks principally today to a discussion of therapy. Certain recent developments make this aspect of the problem most pertinent at this time.

Before entering upon a description of the various therapeutic aids at our disposal, I would like to make a few general statements regarding this disease. As you know, it was present in the Mediterranean area for many years before appearing in this country. The first endemic cases in the United States were reported from the Mexican border in 1911,[1] and the source of the infection was goat's milk, from animals infected with Brucella melitensis, the same variety of the organism which caused the old world disease. It was not until 1924 that a case was reported in this country in which the causative organism was Brucella abortus,[2] the variety which commonly infects the cow. Brucella suis, the porcine strain, was isolated, in Indiana incidentally, in 1914, but it was not until recent years that its importance in human brucellosis was clearly understood.

From a practical point of view, it should be pointed out that all three strains of the organism produce nearly identical symptoms in the human being, the disease produced by Brucella abortus being somewhat milder. Differentiation is important mainly from the bacteriologic and epidemiologic points of view, not from the clinical.

In discussing epidemiology, one poorly understood point should be emphasized: the importance of the hog as a source of human brucellosis.[3,4] We have been well educated on the value of milk pasteurization, cattle vaccination, et cetera, but not enough has been said about the importance of direct contact with infected hogs as a source of human disease. This is particularly important in farmers, butchers, and packing house workers. From another angle the infected hog is of equal importance: far too many farmers have worked hard and long in an effort to clean out an infected cattle herd, while disregarding infected hogs which were the source of the disease in cows. (It has been shown that the strains do not confine themselves to the animal host for which they are named. Brucella suis infection is common in cows, while Brucella abortus may infect hogs. Brucella melitensis has been isolated from hogs,[5] as well as from goats.) Before leaving epidemiology, I should like to re-emphasize the importance of direct contact as a source of infection, both from cows and hogs.[4] Whereas infected milk is the source of

* Presented before the General Scientific Session of the Indiana State Medical Association at the annual session at French Lick, October 30, 1947.

1. Gentry, E. R., and Ferenbaugh, T. L.: Endemic Malta Fever in Texas, J.A.M.A., 57:889, 1911.
2. Keefer, C. S.: Malta Fever Originating in Baltimore, Bull. Johns Hopkins Hosp., 35:6, 1924.
3. Hardy, A. V., Jordan, C. F., and Borts, I. H.: Undulant Fever: Further Epidemiologic and Clinical Observations in Iowa, J.A.M.A., 107:559, 1936.
4. Jordan, C. F., and Borts, I. H.: Brucellosis and Infection Caused by Three Strains of Brucella, Am. J. Med., 2:156 (Feb.), 1947.
5. Jordan, C. F., and Borts, I. H.: Occurrence of Brucella Melitensis in Iowa, J.A.M.A. 130:72 (Jan. 12), 1946

most epidemics, almost all isolated cases can be traced to contact sources. This cannot be too strongly emphasized.

Pathology is not within the scope of this paper, nor are symptomatology, diagnosis, and differential diagnosis. However, because diagnosis is such a difficult problem in the chronic disease I should like to mention briefly a few important points. First: chronic brucellosis should always be considered in the differential diagnosis of any chronic, low-grade, remittent or recurrent illness, characterized chiefly by tiredness. Second, a positive agglutination test is not necessary for the diagnosis of the chronic disease. Third: a positive skin test is necessary if the agglutination is negative. Fourth: the positive skin test does not of itself mean active infection, and serves only to confirm the diagnosis made on other criteria. Fifth, last, and most important: because our means of diagnosing the chronic disease are so poor, we must always carefully exclude more easily defined entities before making this diagnosis.

Treatment of Acute Brucellosis

In treating acute brucellosis, a disease frequently self-limited, any therapeutic measure must be considered critically before a correct evaluation be reached. Because such critical evaluation has not always been adhered to, many agents have been advocated and later discarded. In Table I I have listed many of the agents and methods of therapy which have been described in medical literature. Most of these have since fallen into disrepute, and we will proceed to discuss only those which appear to have value, and to describe the methods for their use.

Table I

Agents and Methods which Have Been Used in Treatment of Acute Brucellosis

- Fever Therapy, non-specific
  - Intravenous Typhoid
  - Inductotherm
  - Kettering-type apparatus
- Oral Chemotherapy
  - Sulfonamides
  - Penicillin
  - Para-aminobenzoic acid
  - Nicotinic acid
- Parenteral Chemotherapy
  - Sulfonamides
  - Penicillin
  - Streptomycin
  - Metaphen
  - Radioactive colloidal manganese
  - Mercurochrome
  - Trypan blue
  - Neoarsphenamine
  - Gentian violet
  - Sodium cacodylate
  - Nicotinic acid
- Blood Products
  - Whole blood transfusions
  - Convalescent serum
  - Plasma
- Bacterial Products
  - Ordinary vaccines
  - Oxidized vaccines (Foshay)
  - Antiserum (Foshay)
  - Brucellin (Huddleson)

Table II

Specific Therapeutic Agents of Proven Action

Commercial vaccine, mixed strains
Special vaccines prepared from single strains
Oxidized vaccine (Foshay)
Brucellin (Huddleson)
(A culture filtrate without bacterial cells)
Antiserum (Foshay)

In Table II I have listed the so-called "specific" therapeutic agents, those prepared from Brucella organisms. These have been used for many years, and their value is generally accepted. Ordinary vaccines appear to be the least desirable of the group, especially as now prepared commercially. They include Brucella suis, which is highly reactive in sensitive patients, leading to marked local and general reactions. Single-strain vaccines, especially those prepared from Brucella abortus, are less reactive and more useful. The refined products are still less reactive, especially as regards local tissue necrosis.

In Table III I have listed the useful and proven non-specific agents and methods. Some of these are of particular interest because of our accumulated experience in chemotherapy over the past decade. We have come to regard these modern "miracle-drugs" with nearly as much respect as does the layman, so it was no surprise when we were told that streptomycin was specific for Brucella organisms in vitro. Our disappointment, then, was considerable when we found that the human body did not behave like the culture tube when streptomycin was used to treat acute brucellosis. However, this drug has definite value, as do the sulfonamides, especially sulfadiazine and sulfamerazine. Penicillin appears to be of no value.

I have not included para-aminobenzoic acid in this table, as its value is as yet unproven. I have been working with it this summer, but results so far have been inconclusive. Its use was suggested on the theory that the Brucella organisms, like rickettsia, may accumulate in intracellular foci where ordinary agents do not penetrate.

Before going into detail in describing therapy, I would like to digress for a moment. The majority of early workers were of the opinion that the disease could be successfully treated only if

Table III

Non-specific Agents and Methods of Proven Action

Sulfonamides
(Especially sulfadiazine and sulfamerazine)
Streptomycin
Blood transfusions
Fever therapy

high fever responses were induced by the agent used. Some commercial preparations still come out with descriptive literature advocating such therapy. This is misleading at best, dangerous at worst. Not only may severe local and general reactions be produced by such methods, but there is a constantly increasing mass of evidence to show that these bouts of fever are unnecessary. Those of us who have advocated milder therapy, and I am by no means alone in this campaign, can point to many successfully treated cases. It should be pointed out that those who advocated, and are still advocating what I will henceforth describe as shock therapy, are among the pioneers in the treatment of this disease. Their experience is wide, their knowledge invaluable, and in their hands such treatment is apparently harmless. But for the man who treats only an occasional case, and cannot judge sensitivity accurately, it is wiser to use methods which are less liable to produce severe reactions. In summation of this point, I can only say that for myself and many others shock therapy has appeared unnecessary as well as unwise, and I must caution all of you against blindly following such instructions.

The aim of therapy in most infectious diseases is termination of the acute course, with attendant recovery. In acute brucellosis we have this aim, and an additional one: the prevention of recurrences. These latter are characteristic of this disease, and no case can be considered cured unless followed for many months. I have seen an acute relapse (apparently not a reinfection) occur after a two-year interval. Most recurrences occur within a matter of weeks, however, and for practical purposes a patient who is symptom-free for a year can be assumed to be cured of his disease.

In Table IV I have attempted to set down in a workable manner my ideas for the specific treatment of acute brucellosis. There are so many variations in patient response that in this disease, more than any other, individualization of therapy is paramount. However, if you err always on the side of caution you will not harm your patient, and will soon find the dosage level most effective for him. Several years ago I first advocated the use of intradermal vaccine,[6,7,8] principally because the extent of local reaction could be accurately measured. I still believe that this is the best route for therapy, although I have discarded vaccine in favor of brucellin because there is less local tissue damage with the latter product. The intradermal reaction can be easily evaluated, making the decision regarding subsequent dosage an easier one. The ideal dose is one which produces a moderate area of local erythema and induration, with no increase in the patient's temperature, and no local slough. It is the dosage just less than that which will produce a generalized reaction. In practice I increase the amount of brucellin fairly rapidly, depending on reaction, until I have produced some fever. I then drop back to the last dosage which produced no temperature rise and continue throughout the course of therapy. However, if, as often happens, the patient makes a good clinical response to a low dosage, becoming both symptom-free and fever-free, therapy is continued at that level rather than trying to find the reaction dose. The brucellin is administered every 3 or 4 days, and is continued for at least 12 weeks after the patient has become fever-free. This long-continued therapy appears to be the best insurance against relapse.

Table IV

Specific Treatment of Acute Brucellosis (The author's method)

1. Skin-test with 0.1 cc. of 1-12,000 brucellergen. (This must be diluted in all cases of suspected hypersensitivity.)
2. Skin-test is read in 48 hours, and recorded in centimeters of erythema. Increase in fever during this 48 hours is noted, as are lymphangiitis and lymphadenitis.
3. For therapy brucellin is diluted (with normal saline) 1-10, 1-100, 1-1,000, 1-10,000, 1-100,000.
4. If skin reaction to brucellergen has been mild (less than 3 cm.) and has produced no generalized reaction (fever) start intradermal therapy with 0.1 cc. of 1-10 brucellin.
5. If skin reaction has been moderate (3-6 cm.) and no general reaction occurred, start therapy with 0.1 cc. of 1-100 brucellin.
6. If skin reaction has been severe (over 6 cm.), but no general reaction occurred, start with 1-1,000 brucellin.
7. If skin reaction is severe, and general reaction occurred, start with 1-10,000 brucellin.
8. If skin-test sloughed, start with 1-100,000 brucellin.
9. Intradermal injections are to be repeated every 3-4 days. Increase the dosage as indicated by the amount of reaction. The ideal therapeutic dose is that which will produce a moderate local reaction without generalized response.
10. This should be continued for at least 12 weeks after patient is free from fever.

Before we leave this phase of the subject, a word of caution should be added regarding skin-test material and dosage. Brucellergen is the agent of choice, in my opinion, as tissue necrosis is rare.[9] However, even brucellergen must be diluted in presumably sensitive individuals, such as farmers, packing-house employees, and veterinarians. As

6. Urschel, D. L.: Brucellosis, A Report of 53 Cases, with an Introductory Report on Intradermal Vaccine Therapy, J. Ind. St. M. A., 36:294 (June), 1943.
7. Urschel, D. L.: Intradermal Vaccine Therapy in Brucellosis, J. Ind. St. M. A., 36:385 (Aug.), 1943.
8. Urschel, D. L.: Intradermal Vaccine in the Treatment of Acute Brucellosis, J. Ind. St. M. A., 37:184 (April), 1944.
9. Urschel, D. L.: A Comparison of Vaccine Products and Brucellergen in the Intradermal Test in Brucellosis, J. Ind. St. M. A., 38:8 (Jan.), 1945.

now prepared commercially, the dilution is 1-12,000. This should be additionally diluted 1-10 with normal saline, or even 1-100, if there is reason to suspect undue sensitivity.

Similar caution must be exercised in selecting the initial dosage of brucellin for therapy. The standards set forth in Table IV are only approximate.

The same general principle should be adhered to in therapy with commercial vaccine or with other specific preparations. For instance, Dr. Foshay is particularly anxious to avoid generalized reactions with his oxidized vaccine, and many others agree in this principle.

Vaccine has been given intravenously, but I think that I have made myself clear as regards my opinion of shock therapy of this type. I see no advantage and many disadvantages in it.

I have not tabulated the exact dosages in shock therapy, as these can be obtained from the literature accompanying the preparations.

In summarizing this portion of the paper, it is emphatically re-emphasized that in my opinion the correct therapy with specific products is such as to avoid severe generalized reactions. I may appear to be unduly obsessed with this point, but I have too often seen patient and physician disgusted and discouraged because the treatment made the patient feel worse than he had before.

Last year, at our annnal meeting, Dr. Herrell discussed streptomycin, and I believe that he stated that its action in human brucellosis was as yet unproven, even though it was apparently specific in vitro. In the past year publications have appeared which report good results in the acute disease, [10,11] but this is still not a unanimous opinion.[12] It appears that the action is best when combined with one of the sulfonamides, particularly sulfadiazine or sulfamerazine. The dosages of both the sulfonamides and the streptomycin are the customary ones used in treating infectious diseases. I believe that this form of therapy should be used only in those patients who have failed to respond to other methods. I say this for two reasons. The first is the practical one, that it requires hospitalization for the patient, and is quite expensive. Most patients with acute brucellosis are ambulatory or semi-ambulatory, and can be treated at home or even with office visits. My second reason for not advocating it as routine therapy is that its value is not yet well enough defined. In ordinary acute brucellosis the response to brucellin or vaccine is too satisfactory to advocate replacement with therapy such as this. However, it should be emphasized that in the presence of certain complications, notably acute bacterial endocarditis, the use of chemotherapy is certainly the treatment of choice.

When the first reports on sulfonamide therapy in brucellosis appeared in the literature they were generally optimistic, but it soon was proven that such optimism was unjustified from a long range viewpoint.[13] However, in recent years, with the use of the newer sulfonamides, such as sulfadiazine and sulfamerazine, satisfactory reports[12,14] have appeared sufficient to make us re-evaluate this form of therapy. I think that this opinion will be shared by many of those present: there appear to be some patients with acute brucellosis who will respond readily, even dramatically, to administration of one of these drugs. However, in the majority of instances, such medication is of no value. In my own practice I have used brucellin first, in the method outlined above, and have then resorted to the sulfonamides in those patients who failed to improve. Further failure to improve has been an indication for combining streptomycin with the sulfonamides. I definitely feel that sulfonamides are not the first agent to be resorted to in these patients. There are several reasons for this. For one thing, sulfonamides are obviously overprescribed and overdispensed. They are used for so many conditions, often unnecessarily, that we are undoubtedly sensitizing many individuals. In the second place, brucellosis is a disease which tends to have a low total polymorphonuclear count at best, and the use of a drug which may further suppress bone marrow activity is definitely contraindicated. My third reason for not using them is the obvious one that they are not as effective as the specific agents.

There recently appeared in the lay literature, particularly in farm publications, a report that Dr. Huddleson had developed a new and revolutionary method of using the sulfonamides in the treatment of acute brucellosis. I found myself so beleaguered by my patients, and the medical literature so sterile of any reports regarding this treatment, that I wrote Dr. Huddleson. He replied at length, and with his permission I am quoting from the information he provided me: "We have found through test tube and guinea pig studies that sulfa drugs have a much more important and far reaching action than heretofore supposed. Some of the sulfa drugs, such as sulfadiazine and sulfamerazine, actually potentiate or increase the action of the antibody-complement system. The complement in the blood is the agent that does the actual killing of the bacteria. It appears for some reason that these drugs have a higher potentiating action on normal antibodies, if there is such a thing, than on the antibodies that are formed during infection.

10. Finch, Geo. H.: Streptomycin Therapy in Undulant Fever, Am. J. Med., 2:485 (May), 1947.
11. Pulaski, E. J., and Amspacher, W. H.: Streptomycin Therapy in Brucellosis, Bull. U. S. Army Med. Dept., 7:221 (Feb.), 1947.
12. Spink, W. W.: The Diagnosis and Treatment of Brucellosis, Miss. Doctor, May, 1947, pp. 1-5.
13. Urschel, D. L.: Sulfonamide Therapy in Brucellosis, A Review of Literature, J. Ind. St. M. A., 37:57 (Feb.), 1944.
14. Spink, W. W., and Hall, W. H.: The Diagnosis and Treatment of Brucellosis, Med. Clinics of N. A.: 343 (March), 1945.

It has been found on Brucella infected guinea pigs that the daily feeding of a small amount of sulfadiazine over a period of 6 days and 1 injection of normal serum given during the first 24 hours of feeding produce a bacteriocidal combination in vivo which is effective in curing the disease. It appears that a similar combination (using normal human plasma) is just as efficacious in treatment of acute human brucellosis as it is in the treatment of advanced brucellosis infection in the guinea pig. We have suggested to physicians that they administer only a small amount of either of the drugs mentioned at 4-hour intervals throughout the day over a period of about 6 days. The amount of the drug need not be much more than from 3 to 7½ grains per dose. In other words, it is not necessary to maintain a high level of the drug in the blood in order for it to potentiate the antibody. At the end of the first 24 hours administration of the drug, an intravenous injection of 250 cc. of blood plasma or about 300 cc. of whole blood should be given."

This method has been used in a small number of patients, with marked drop in temperature within 24 to 48 hours after the blood transfusion. It is too early to be sure that these patients will not relapse, and there may be patients who will require more than one transfusion. The series of cases reported is far too small to provide a real index of the value of this method of treatment, but it is certainly one not difficult to use, and I am going to give it a thorough trial in those patients who fail to respond to specific therapy.

Treatment of Chronic Brucellosis

We may very well summarize this phase of the subject by saying that everything we said before is true, only more so. It is in these patients that we are most likely to encounter extreme sensitivity. I have seen patients show a reaction to commercial vaccine or brucellin diluted one million times. For this reason when I start therapy on such patients, I use highly diluted brucellergen for the skin test, and if there is evidence from this of extreme sensitivity, a dilution of brucellin of 1:100,000 or even higher is used for the initial therapeutic dose. We then increase the dosage every 3 or 4 days in the manner described for the acute disease. However, because of the hypersensitivity so frequently encountered, the increase in amount of brucellin must be relatively slow. The treatments should be continued for at least 20 weeks, and longer if the patient fails to show proper clinical improvement. Subjective response is the only effective measure of improvement in these people. There are no objective methods which will enable us to say that a patient with chronic brucellosis is cured.

It must be emphasized here that in these patients there is no logical and valid argument for the use of shock therapy. Even the advocates of that method of treatment in acute brucellosis state that it is of little value in the chronic form. You already have a tired and worn-out patient. There is no therapeutic value in giving him a high fever reaction once or twice a week. He feels worse after each such reaction, and promptly, and properly, decides to seek other medical aid.

Summary and Conclusions

In summary, then, it may be stated that the preferable agent for therapy in acute or chronic brucellosis is vaccine or one of the purified preparations prepared from Brucella organisms. The preferred route of therapy is the intradermal one, and the preferred method is that of frequent, small injections, in dosages which produce a moderate local reaction and no generalized fever response. Such treatment should be continued for a period of at least 12 weeks after the patient with acute brucellosis becomes fever-free, and for at least 20 weeks in the treatment of any case of chronic brucellosis.

Streptomycin alone is apparently of some value in acute brucellosis, but in combination with certain of the sulfonamides it appears to be more effective.

The sulfonamides alone, especially sulfadiazine, or sulfamerazine, have a prompt and effective action in an occasional case, but in most patients they are ineffective when used alone.

The recent combination of sulfonamide therapy with blood transfusions has been discussed briefly. In experimental animals it has been proven to be very effective, but its use in human beings is as yet limited. Preliminary reports are optimistic.

In chronic brucellosis, the only treatment of any value is with the specific agents, preferably brucellin, used in small, frequent doses as described above. There is no place in the treatment of chronic brucellosis for the sulfonamides or streptomycin.

VAGUS NERVE RESECTION (VAGOTOMY) IN THE TREATMENT OF ACUTE PERFORATED DUODENAL ULCER

Report of a Case*

David C. Straus, M.D.

MICHIGAN CITY

The rather new operation, resection of the vagus nerves to the stomach, originally termed vagotomy, performed either transthoracically or transabdominally, has been found by several surgeons of experience to be preferable to subtotal resection of the stomach for the treatment of uncomplicated duodenal ulcer.

The following case is reported in the belief that it is the first on record in which this operation has been performed as part of the treatment of an acute perforation of a duodenal ulcer. In reply to a letter from me regarding this supposition, Dr. Lester R. Dragstedt, who originated the vagotomy operation, wrote me on February 7, 1947, "I have not yet done this procedure in a case with perforation nor have I heard of its being performed." I have not found any record of a similar case in the literature in which vagotomy was performed.

Report of Case

A machinist, male, aged 40, had been examined and treated by me January 13 to January 17, 1946, for duodenal ulcer, demonstrated by x-ray examination. He gave a history of duodenal ulcer symptoms dating back 20 years. The advisability of a vagotomy operation was explained to him at that time. Meanwhile, he was put on medical management and apparently was getting along satisfactorily, because he did not return for check-up the remainder of that year. His height was 5 feet 6 inches. His usual weight was 120 to 125 pounds.

The next time I saw him, when he was brought to the hospital as an emergency case, I learned that recently he had been losing weight and that when last weighed, January 22, 1947, it had gone down to 112 pounds, and that for the past week he had been vomiting once a day, toward evening.

While at work on the morning of January 28, 1947, he felt nauseated, went to the men's toilet room to rest, at about 11 A. M., and while there he was taken with a sudden pain in the mid-epigastrium so severe that he fainted. He was brought to The Clinic Hospital by ambulance, arrived at 11:50 A. M., faint and scarcely able to talk. I recognized him, diagnosed an acute perforation of his duodenal ulcer from the history, previous findings, and the board-like rigidity of his abdomen. Preparations for immediate operation were made. Meanwhile, blood counts were made. These showed Hb. 13 gm or 85.1%; R.B.C. 4,570,000; W.B.C. 13,550; differential white blood

	B	E	M	J	B	S	L	M	N
count	1	1	0	2	6	61	27	2	69

Urinalysis showed normal urine. Also, a 14 x 17 inch x-ray film was taken of the lower part of the chest and the abdomen at 6 feet, with the patient standing, to detect if there was any free air in the abdomen, under the diaphragm. No free air was demonstrated.

Before going to the operating room I viewed the x-ray films taken of his stomach and duodenum on January 16, 1946. These showed (Figure 1) a large, low-lying stomach, the greater curvature lying below the level of the crest of the left ilium, and the pylorus and the first part of the duodenum

Figure 1



X-ray film taken January 16, 1946. Note (a) that the peristaltic waves are very deep, i.e. they are hyperistaltic, and (b) that the first part of the duodenum is irregular, typical of a duodenal ulcer; also (c) that the duodenum is low-lying, crossing in front of the bodies of the 3rd and 4th lumbar vertebrae.

* Reported before the Chicago Surgical Society, March 7, 1947, in the discussion of the paper presented by Karl A. Meyer, et al, referred to in my paper.

lay at the level of the bodies of the third and fourth lumbar vertebrae. Several of the films plainly showed the ulcer defect in the first part of the duodenum, near the pyloric sphincter.

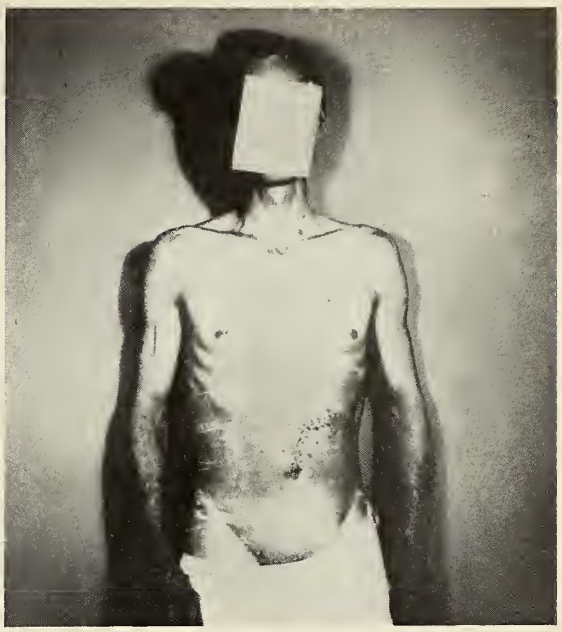
OPERATION. The operation was performed under continuous spinal anesthesia, using the Lemmon equipment and technic but using metycaine instead of novocain.

Knowing the location of the pylorus and the duodenum, the abdomen was opened through a left paramedian incision, beginning two inches above the level of the umbilicus and continuing it downward and to the left of the umbilicus, to just below the level of the umbilicus. On opening the peritoneum no air escaped and no free fluid was encountered. The anterior wall of the pyloric end of the stomach presented. On drawing the stomach to the left, the first portion of the duodenum was brought into the incision and an O-sized perforation was at once seen at the middle of the anterior wall of the first portion of the duodenum, just to the right of the pyloric sphincter. No air or fluid contents of the duodenum were escaping, merely blood. There was a wide area of induration about the perforation, which was at once closed by means of 3 interrupted black silk stitches carried through the entire thickness of the wall of the duodenum. Next, the incision in the abdominal wall was enlarged vertically upward about half an inch and then curved sharply, almost horizontally, just below the twelfth rib, which extended far forward, cutting transversely across the left rectus muscle and its sheaths, and continuing the incision for a distance of 3¾ inches, for the purpose of performing transabdominal resection of the vagus nerves to the stomach (vagotomy). The incision differs from any I have seen reported in the literature for this operation. Dr. Lester R. Dragstedt, who devised and was the first to perform the vagotomy operation, both transthoracic and transabdominal, reports[1] that in the operation of transabdominal vagus section a left upper paramedian incision has been made, at the lower end of which an almost transverse incision is performed, about 2 cm. above the umbilicus, from the lower right rib margin to a point several centimeters below the left costal border. Since this paper was written, he has been using a mid-line incision.

Transabdominal vagotomy was performed, following the technic described by Dragstedt and as I have seen him perform it. I was able to pull the esophagus downward into the abdominal cavity for a distance of about 2 or 3 inches. There were two main vagus trunks, a left vagus lying somewhat anterior on the esophagus, and a right vagus lying posterior to the esophagus. There was also one large communicating branch between the right and the left vagus.

After completing the vagotomy operation, the first portion of the duodenum was brought into the incision and the perforated duodenal ulcer closure was reinforced by suturing over it a flap of omentum. Finally, the abdomen was closed in layers, without drainage. The patient was returned to bed in fairly good condition.

Figure 2



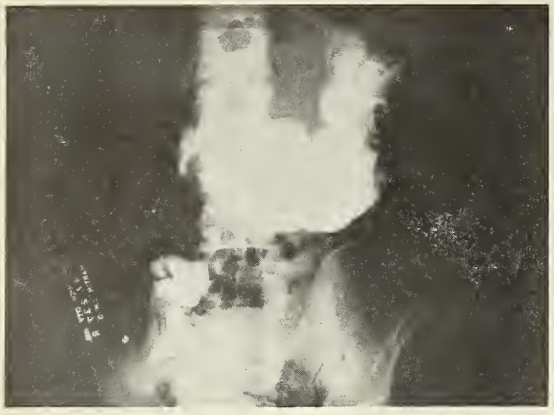
Photograph taken February 9, the twelfth postoperative day. This shows the low position and type of incision used.

Postoperative care consisted of intravenous administration of 1,000 cc. of 5 per cent glucose in normal saline solution on return to bed, and repeated at 9 P. M. that night. After that day, 1,000 cc. of 5 per cent glucose in sterile water was administered intravenously three times a day for the following three days. Wangensteen suction syphonage was used practically continuously for four days. Penicillin administration was begun at 6 P. M. that evening and was administered for five days.

At 8:30 A. M. the morning following the operation, January 29, the patient voided spontaneously. Catheterization never had to be resorted to. His abdomen was soft during the entire convalescence. Convalescene was uneventful and free from any ulcer pain. On February 2, the fifth postoperative day, he was comfortable, the suction syphonage was discontinued, as likewise the administration of 5 per cent glucose solution intravenously, and feeding by mouth was begun, giving him 1½ ounes of homogenized milk every hour when he was awake, for the next three days. On February 3, he stated, "I am feeling better than I have at any time during the past year and a half." On February 4, he said, "I am feeling fine. I could get up and walk around." On February 5, solid foods, such as poached eggs on toast and cereals, were begun and were well tolerated. He then looked

[1] Dragstedt, Lester R., Minnesota Medicine, 29:597 (June) 1946. Fig. 4A. Dragstedt, Lester R., Surg., Gyn. and Obstetrics, 85:461 (Oct.) 1947.

Figure 3



X-ray film taken January 11, 1947, 15 minutes after the barium meal was given. Note (a) that the peristaltic waves are of normal depth, and (b) that the stomach has begun to empty rapidly and barium has already reached the lower jejunum.

Figure 5



X-ray film taken January 11, 1947, 2 hours after the barium meal was given. Note that the stomach is about 1/2 empty.

better than I had ever seen him look before. On February 7, he said, "I am feeling fine. I feel as if I could get up and run all over the building." That morning the three tension sutures used were removed. After their removal he said, "I have had no ulcer pain since the operation—not even the pain in the solar plexus." On February 9, all fifteen skin sutures used were removed and he was allowed to be up and about. His photograph was taken that day to show the incision (Figure 2).

On February 11 he was given barium meal, and x-ray studies were made. The barium rapidly passed down the esophagus until it reached the level at which the vagus nerves had been resected. It hesitated here briefly before passing on into the stomach. (This did not occur at a second x-ray examination done one week later.) The stomach showed normal peristaltic waves (Figure 3 and Figure 4) and not the deep hyperperistaltic contractions shown in the films taken in January 1946 (Figure 1). The stomach began to empty promptly and after fifteen minutes (Figure 3) barium had already reached the lower jejunum. At the end of one hour (Figure 4) the stomach was about one-third empty and at the end of two hours (Figure 5) about one-half empty. At the end of twenty-four hours (Figure 6) all of the barium was in the colon.

He was discharged from the hospital the following day, February 12, 1947, apparently cured. He was told that he should keep on an ulcer diet to begin with but could gradually try other foods, and that in time he could have an unrestricted diet.

Figure 4



X-ray film taken January 11, 1947, 1 hour after the barium meal was given. Note (a) that the stomach is about 1/3 empty, and (b) that the peristaltic waves are of about normal depth.

Figure 6



X-ray film taken January 12, 1947, 24 hours after the barium meal was given. Note that all of the barium now is in the colon.

He returned to work on Monday, March 3. Later that week he said he felt well and stronger every day. He has continued at work ever since. When seen on May 24, 1947, four months after operation, he was entirely free from ulcer symptoms and had been ever since the operation. He had gained 13 pounds in weight since leaving the hospital—weighed 123 pounds. He looked and felt very well. He stated that his appetite was very good and that he eats everything, even including pickles, both sweet and sour, sauerkraut, cabbage, onions and tomatoes, without any abdominal discomfort whatsoever. Onions had bothered him for the past four to five years and tomatoes had bothered him for the last ten to fifteen years.

Comment

Obviously, few cases of acute perforation of a peptic ulcer will be seen so early that one can perform vagotomy with safety. Final conclusions in this case cannot be determined until after many months have elapsed since operation, though the result so far justifies optimism.

In view of the high incidence of serious sequelae following recovery from perforated peptic ulcer, as recently reported by Karl A. Meyer, Ernest H. Werbel and Donald Kozoll,[2] the addition of vagotomy as part of the treatment of acute perforation deserves consideration and further trial. These authors found that in the seven year period 1939 to 1945 inclusive, 239 patients suffering from peptic ulcer, who had recovered from a previous perforation, were admitted into the Cook County Hospital, Chicago. Of this group, 86 per cent were admitted because of intractable pain, and 34 per cent because of bleeding. Reperforation was seen in 17 per cent. In this series there were thirty-five patients whose ulcers perforated twice, five three times, one four times, and one five times. Further gastric surgery was required in 30 percent of this group.

Their conclusions from this study were that repair of a perforated ulcer, contrary to previous teaching, in no way protected the patient against future complications. In fact, it would indicate that the patient's ulcer proclivities were at their peak and that intensive postperforation ulcer management is mandatory if ulcer complications are to be avoided. They felt that even their high incidence of operative intervention (30 per cent) would not appear to justify gastric resection at the time of perforation, as recently has been proposed.

The results so far obtained in the case here reported lead me to believe that vagotomy should be added as part of the treatment of acute perforation of a peptic ulcer in cases in which it can be done with safety.

[2] Meyer, Karl A., Werbel, Ernest H., and Kozoll, Donald: "Surgical Sequelae Following Recovery from Perforated Peptic Ulcer," Proc. Inst. of Med. of Chicago, Vol. 16, No. 14, May 15, 1947, Chicago Surgical Society, p. 404.

ANESTHESIA FOR PATIENTS WITH DISEASE OF THE CARDIOVASCULAR SYSTEM*

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STUDIES of this subject by anesthesiologists are few in number. We must interest ourselves in the problem presented by this group of patients for two reasons: the number of people over the age of sixty years is increasing, therefore we shall see a larger number of patients with degenerative diseases of the cardiovascular system; and the mortality rate is greater, reaching 19.4 percent according to Lorhan.[1] Because the physicians caring for these patients are cognizant of the dangers present, and carefully prepare them for operation, few of them die on the operating table and the mortality is lower than might be expected. However, the downhill course of the patient may be accelerated by complications resulting from anesthesia and surgery.

With this in mind, the anesthesiologist must cooperate with the surgeon and the internist in choosing the course which will provide the greatest benefit to the patient without being more of a burden than his cardiovascular system can tolerate. Sometimes this course will preferably be that of medical management rather than surgical, as illustrated by the following review. A seventy-two year old woman with hypertensive cardiovascular renal disease was subjected to general anesthesia for the repair of a small umbilical hernia because of vague

* Presented before the Section on Anesthesia of the Indiana State Medical Association, at the annual session at French Lick, on October 29, 1947.

1. Lorhan, Paul H.: Heart Disease, Anesthesia and Surgery. Anes. & Analg. 25:256-263 Nov.-Dec. 1946.

abdominal symptoms. She died three weeks later of heart failure.

Local infiltration and regional block cause a minimum of disturbance to physiology and should be used when they provide satisfactory operating conditions. These methods have severe restrictions. For best results a vasoconstrictor substance is required with resultant sympathetic stimulation, increased cardiac activity and oxygen consumption which may tax the capacity of stenosed coronary vessels. The apprehension and pain which may be present is shocking and therefore the anesthesia will be unsatisfactory and dangerous. For intra-abdominal surgery certainly, and for many other operations, general or spinal anesthesia is necessary. It is these methods which we shall consider.

In the management of anesthesia for the patient with cardiovascular disease observance of the following principles will yield a maximum of good results:

1. Reassure the patient.
2. Avoid excitement and struggling during induction.
3. Provide oxygen in excess at all times.
4. Maintain a stable blood pressure.
5. Avoid increasing the load of the heart.
6. Avoid deep inhalation anesthesia.
7. Digitalize preoperatively when indicated.
8. Postoperatively use measures to support the patient and to prevent complications.

Reassure the patient by discussing briefly and encouragingly the anesthesia and operation. Build up rapport. Inspire confidence.

Struggling and excitement lead to anoxia and elevated blood pressure, both of which are harmful to a damaged heart. Induction with cyclopropane or a small amount of pentothal sodium, followed by cyclopropane or nitrous oxide, is usually rapid and smooth.

Oxygen in excess is necessary at all times in the tissues of the patient as well as in the mixture of anesthetic gases. This implies that the mixture of anesthetic gases will contain 25 percent or more of oxygen, that respiratory exchange will be adequate, and that supplementary oxygen or a mixture of nitrous oxide and oxygen containing 25 percent to 50 percent oxygen will be used with sodium pentothal or spinal anesthesia.

Maintain the blood pressure at the preoperative level by the cautious use of fluids or blood intravenously, of neosynephrin, and of 1 percent sodium nitrate solution. Ten percent or 20 percent glucose will increase the blood volume by drawing fluid from the tissues, which is preferable to the addition of excess fluids to the body. Do not use solutions containing salt. Neosynephrin is the vasopressor substance of choice as it does not stimulate the sympathetic system, nor increase the heart rate. Sodium nitrate solution will lower an elevated blood pressure. Dr. Mary Frances Poe reports in an unpublished study that the patient with an acute hypertension during anesthesia is less likely to have complications and death than is one with an acute hypotension or a labile blood pressure. Patients with hypertension and coronary sclerosis tolerate a drop in blood pressure poorly. It is suggested by Belinkoff[2] that aminophyllin, grains viiss intramuscularly, fifteen minutes preoperatively, produces coronary dilatation and bronchial relaxation and is of value in patients with coronary disease. Use spinal anesthesia with caution because of its effect on blood pressure. Anesthesia with cyclopropane may be followed by hypotension. To minimize this danger, substitute nitrous oxide for cyclopropane fifteen minutes before the end of the anesthesia; hypotension will usually be evident within this time, and the anesthesiologist can treat it before it is of severe degree.

In so far as is possible do not put extra burdens on the heart and increase the oxygen requirements. When it is necessary to use a vasopressor substance, neosynephrin is satisfactory since it does not increase the heart rate and is not markedly stimulating to the sympathetic system. Fluids intravenously should be used sparingly. Hypertonic dextrose solution will attract water from the tissues to increase blood volume. Sodium chloride may be contraindicated.

Deep inhalation anesthesia produces deleterious effects on circulation and may cause increased pulmonary morbidity. These hazards are lessened by combining with the inhalation agent a field block or by using curare to produce relaxation.

Preoperative digitalization is indicated for those patients with congestive failure, and some[3] advocate it for those with cardiac hypertrophy. Digitalis increases the activity of the carotid body and sinus and reflex changes in respiration and circulation are more likely.

Postoperatively there are several measures which are of supportive value. The stir-up regimen of Waters helps greatly to prevent pulmonary stasis and morbidity. The tracheal toilet removes excess secretions and promotes more effective aeration. Oxygen is valuable, but should be dispensed with as soon as possible following operations in the upper abdomen because atelectasis is more likely to occur if its use is prolonged. Penicillin and sulfa drugs control infection and reduce the strain on the heart. Binders and dressings should not restrict respiration. Prevent distention by the use of Wangansteen suction. Massage, voluntary leg movement and getting the patient out of bed as soon as possible will help to restore and maintain normal physiology.

The choice of anesthetic agent and method depends upon the skill and experience of the anesthesiologist, the operative requirements and the pharmacologic effects of the agent. A competent

2. Belinkoff, S.: The choice of anesthesia in cardiac disease. Anes. 7:268 May 1946.
3. Christian, H. H.: Drug Treatment of Cardiac Decompensation. J.A.M.A. 108:44, 1937.

anesthesiologist may secure good results by various combinations of agents and methods. It is not necessary to use a routine approach to the problem. He should not be restricted in his management of an anesthesia by the prescriptions of those whose knowledge of this subject is solely theoretical. Only when the anesthetist is unskilled is the use of open drop ether indicated. An anesthesiologist may be more experienced or adept in the use of certain agents and methods than in others. Should he attempt or be urged to use an unfamiliar method in a poor risk patient, the result may be fatal.

Where muscular relaxation is not important pentothal sodium 2.5 percent solution, supplemented with a mixture containing 50 percent each of nitrous oxide and oxygen, provides a satisfactory, safe anesthesia with little effect on blood pressure and heart action and a short period of postoperative depression. If some relaxation is required it can be provided by the addition of cyclopropane or ether to the mixture of gases, and by the use of curare.

Spinal anesthesia for operations on the perineum and for transurethral prostatectomy is satisfactory and readily controllable. The effect on blood pressure is minimal. In the presence of congestive failure this method is indicated for operations requiring higher levels of anesthesia also, as it relieves some of the load on the heart by performing a bloodless phlebotomy, according to Sarnoff and Farr.[4]

For major abdominal operations we prefer inhalation anesthesia obtained with nitrous oxide or cyclopropane combined with ether. Ether prevents the cardiac irregularities seen with cyclopropane alone. Cyclopropane provides a rapid, quiet induction, and the use of more oxygen than does nitrous oxide. A few milligrams of pentothal sodium provides an even more desirable induction. As indicated above, the use of curare provides relaxation of the abdominal muscles and makes unnecessary deep inhalation anesthesia.

The following tables and discussion indicate the results in 133 patients subjected to 137 anesthetics.

Table I shows the type of heart disease and the relation of this to complications and deaths. The morbidity is higher in patients with valvular heart disease due to rheumatic fever, disease of the coronary arteries, and hypertensive heart disease with renal changes. The death rate is higher in patients with disease of the coronary arteries and luetic heart disease.

Table II shows the relationship of the type of anesthesia to morbidity and deaths. Complications occurred more frequently following cyclopropane ether, ethylene-ether, pentothal sodium, and pentothal sodium-nitrous oxide-oxygen anesthesia. Deaths were more frequent following cyclopropane-ether-curare, and pentothal sodium-nitrous oxide-oxygen anesthesia. These figures are probably a reflection of the preoperative condition of the patient and in some instances of the seriousness of the operation, rather than of the anesthetic agents.

	Number	Complications	% Complications	Deaths	% Deaths
TABLE I.					
Type of heart disease					
Valvular disease due to rheumatic fever	18	4	22.2	0	0
Disease of the coronary arteries	6	1	16.9	2	33
Arteriosclerotic heart disease	22	1	4.5	0	0
Hypertensive heart disease	47	2	4.3	4	8.6
Hypertensive heart disease with renal changes	31	6	19.4	3	9.7
Luetic cardiovascular disease	8	0	0	3	37.5
Miscellaneous (Diphtheritic myocarditis, old)	1	0	0	0	0
TABLE II.					
Type of Anesthesia					
Cyclopropane-ether	54	7	12.9	4	7.4
Cyclopropane-ether curare	23	2	8.7	3	13
Ethylene-ether	5	1	20	0	0
Nitrous oxide-ether	5	0	0	0	0
Pentothal sodium	7	1	14.3	0	0
Pentothal sodium-nitrous oxide-oxygen	13	3	23	3	23
Spinal including spinal with supplementary anesthesia	28	0	0	2	7.1
TABLE III.					
Age					
Under 60 years	56	5	8.9	1	1.8
Over 60 years	77	9	11.7	10	13
TABLE IV.					
Sex					
Male	55	2	3.6	7	12.7
Female	78	11	14.3	4	5.1
TABLE V.					
Operation					
Vaginal	12	1	8.3	0	0
Pelvic	26	3	11.5	0	0
Mid-abdominal	16	2	12.5	3	18.7
Upper abdominal	16	3	18.7	0	0
Transurethral prostatectomy	23	1	4.3	2	8.6
Fractures	11	2	18.2	3	27.2
Amputations	3	0	0	0	0
Rectal	7	0	0	0	0
Herniaplasty	7	0	0	1	14.3
Miscellaneous	16	2	12.5	3	18.7

4. Sarnoff, S. J. and Farr, H. W.: Spinal Anesthesia in the Therapy of Pulmonary Edema: A Preliminary Report. Anes. 5:69-76 Jan. 1944.

TABLE VI.

Cause of death	Postoperative day	Age	Sex	Risk	Anesthesia	Course of Anesthesia	Operation	Type of heart disease
Bronchopneumonia	1	73	m	3	Cyclopropane ether, curare	B.P. irregular	Gastric resection. Reclosure of wound	Hypertension without renal changes
Coronary occlusion	9	66	f	3	Cyclopropane ether	B.P. fell suddenly	First stage Mikulicz	same
Infection and myocardial failure	26	85	m	4	Pentothal nitrous ox. oxygen	smooth B.P. stable	Roger Anderson fixation	same
Myocardial failure pneumonia	10	73	f	4	Cyclopropane ether, curare	B.P. stable	Repair of umbilical hernia	same
Embolus	3	72	m	4	spinal	stable	Trans-urethral resection	Hypertension with renal changes
Hemorrhage from a perinephritic abscess	2	51	m	3	Cyclopropane ether	stable	Nephrectomy	same
Cerebral accident	38	68	f	3	Pentothal nitrous ox. oxygen	stable	Smith Peterson nail	same
Aneurysm of the abdominal aorta eroded into the G.I. tract	47	85	f	6	Pentothal nitrous ox. oxygen	stable	Smith Peterson nail	Luetic cardiovascular disease
Cause not determined	2	69	m	4	Cyclopropane ether, curare	stable	Lysis of adhesions	Luetic cardiovascular disease
No anatomical cause	day of operation	65	m	4	Cyclopropane ether	stable	Removal of a fixation band from the humerus. Curettement	Luetic cardiovascular disease
Coronary occlusion	20	83	m	4	spinal	stable	Trans-urethral resection	Coronary
Coronary occlusion	21	66	f	4	Cyclopropane ether	irregular B.P.	Resection of large bowel	Coronary

TABLE VII.

Complications in relation to the type of heart disease	Valvular disease due to Rheumatic Fever	Disease of coronary arteries	Luetic cardiovascular disease	Arteriosclerotic	Hypertension with renal changes	Hypertension
Fibrillation	1			1	1	1
Decompensation	1				1	
Pneumonia		1			2	
Tachycardia						
Dyspnea				1		
Cerebral accident					1	
Thrombophlebitis						
Hydropneumothorax					1	

Table III indicates that there is no significant difference in the morbidity in the age groups above and below 60 years. The death rate is much higher in the older group.

Table IV. Males suffered a lower rate of complications and a higher mortality rate than did females.

Table V. The complications following upper abdominal operations and the fixation of fractures are more numerous than those following other types of surgery. The death rate is higher following mid-abdominal surgery, which includes intestinal surgery and ventral hernioplasty, fixation of fractures and the miscellaneous group. There were no deaths following surgery in the upper

abdomen, on the perineum, in the pelvis, in the vagina, in the rectum and for amputation.

Table VI shows the data on those patients who died. The gross mortality rate is 9 percent. Two patients, numbers 6 and 8, died of causes not related to anesthesia. The corrected mortality rate is therefore 7.6 percent.

Table VII. Complications were more frequent in the group suffering from hypertensive heart disease with renal changes.

SUMMARY

Suggestions are presented for the management during anesthesia of patients with disease of the cardiovascular system.

An analysis is presented of the data obtained from the study of 133 patients.

AMBULATORY PROCTOLOGY

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AMBULATORY proctology can be defined as the medical and surgical treatment of diseases of the anus, rectum and sigmoid, which do not require hospitalization. At the present time the trend is toward early ambulation in all medical and surgical diseases. The gallbladder patient is sometimes out of bed on the second day following surgery. The cardiac patient is started on activity much earlier than was done a few years previously. No other field, however, offers as many advantages and opportunities for early ambulation as does proctology.

There are several reasons why it is definitely to the advantage of the patient to get out of bed and be active following any rectal procedure. In the first place, rectal pain is proverbially annoying; therefore, it is good therapy to do anything possible to keep the patient busy and help him forget his pain. Also, there is an economic factor, which is still important to most patients in our practices. Any procedure which enables him to avoid hospital expense, plus loss of time away from the job, is at once attractive and beneficial. Furthermore, there is a large number of persons who have rectal trouble. Many of these are deterred from seeking medical advice and relief because of experiences of their friends following surgery. This refers particularly to the extreme amount of pain which some patients have following any rectal procedure. Many times this fear causes them to prolong and endure their discomfort until the pathology has progressed sufficiently to require major surgical procedures. In ambulatory proctology our prime consideration is the comfort of the patient. When confidence is established and fear overcome, corrective measures can be initiated which sometimes save the patient many years of discomfort and anxiety.

When we speak of ambulatory proctology, we must consider that there is no primary difference in treatment except the consideration for the patient's comfort and that the patient is not hospitalized. The techniques of treatment, whether medical or surgical, are otherwise the same as those employed in hospital proctology. It is obvious that medical or nonsurgical techniques are as important for the complete cure of many proctological conditions as are the surgical procedures. Let it be definitely understood that by ambulatory proctology, therefore, we do not mean simply the injection treatment of hemorrhoids, however good this procedure may be.

The proctologist who does his work in his office can have the same careful surgical technique and sterilization that is found in the hospital operating room. Indeed, no one should attempt any surgical procedure in his office unless he is adequately prepared and has the trained personnel to care for the sterilization of supplies and instruments. We are not being too radical in doing extensive rectal work in the office and then permitting the patient to go home. It is not uncommon in this office for the patient to undergo extensive hemorrhoidectomies, fistulectomy, pectinotomy and other proctological procedures, and then to leave the office, sometimes to drive his own car home. If such a procedure is done properly, whether it be in the office or hospital, there should be no danger to the patient. Some of the older rectal men have said that anything which would keep the anus from healing would cause better healing. Certainly early ambulation is a definite asset then towards final good results.

Much of the success of office surgery must depend upon the type of anesthesia used. Most rectal procedures can be done successfully under novocaine, either the aqueous solution or the oil preparation. I am using the novocaine without adrenalin because some procedures require as much as 20 cc. of aqueous novocaine. With the standard preparation of novocaine and adrenalin, some patients develop reactions. Skill must be exercised when the oil solution is used. It must be remembered that laking of the oil under the skin may cause an abscess formation. If the solution is to be used, it is best done so with a 22-gauge needle, so that only a small amount is deposited in each portion. The injections can be made on the lateral

side of the anus and extended in a fan-shaped area with repeated jabs and small amounts of oil injected. I have had the experience on several occasions to do what is apparently a very successful operation for hemorrhoids or even prolapse, and then to have the patient develop a sterile abscess from the oil. This danger notwithstanding, the oil preparation is a very satisfactory form of anesthesia and stands high in the list for use by the proctologist.

Mention must be made of other types of anesthesia which can be used. Caudal anesthesia is very satisfactory. However, it is not generally used in the office, but can be if the surgeon so desires. The chief difficulty is that 20 to 40 minutes are usually required before complete anesthesia is obtained. I have had a few cases in which satisfactory anesthesia was never attained. This was probably due to faulty technique of administration. It does have an advantage in that the patient can walk out of the office. Nitrous oxide is also satisfactory for some procedures. The average office nurse can be trained to administer the anesthetic. It has the advantage of quick induction and rapid recovery. Intravenous pentothal sodium can be used, but is not as applicable to office use as others. A low spinal anesthesia is, of course, ideal because of the nice relaxation which is accomplished. However, I know of no surgeons who use spinals in their own offices. Probably the best routine is a combination of the aqueous and oil solutions of novocaine.

Clinical Anatomy

The anatomy of the rectum is generally well-known. However, there might be some few reminders which are essential to proper treatment of rectal conditions. In the first place, it must be remembered that the normal anus is a slit-like orifice. It is normally closed, but because of the action of the corrugator cutis muscle the surrounding skin is thrown into radiating folds. The perianal skin is freely movable and hairy in adults. Sebaceous skin glands are present close to the anus which might be the seat of infection or pyoderma.

Technically, the anal canal is the upward extension of the anus to the pectinate line. This is usually a distance of 1.5 to 3 cm. It is lined with a modified squamous epithelium and richly supplied with sensory nerve endings. These nerves are derived from branches of the dorsal roots of the first, second, third and fourth sacral, and the first coccygeal segments. Therefore, reflexly, through the common derivation of their nerve supply, gastrointestinal contraction, hyposecretion or hypersecretion, sciatica and related pains may result from anorectal pathology. The rectum, however, is not subject to such pain stimuli. Here we have only a sense of fullness. For that reason work can be done above the pectinate line without an anesthesia.

The pectinate line is located by the presence of five to eight small, tooth-like projections or papillae which are connected with each other at their bases by thin folds of mucous membrane called the valves of Morgagni. These valves and papillae include the anal crypts of Morgagni, and extending upward from each papilla are the longitudinal folds of mucous membrane known as the columns of Morgagni. Embryologically, the pectinate line is formed by the rupturing of the membrane between the cloaca and the embryonic proctodeum. The rupturing of this membrane, which usually occurs sometime before birth, forms the papillae, which later become covered with modified squamous epithelium.

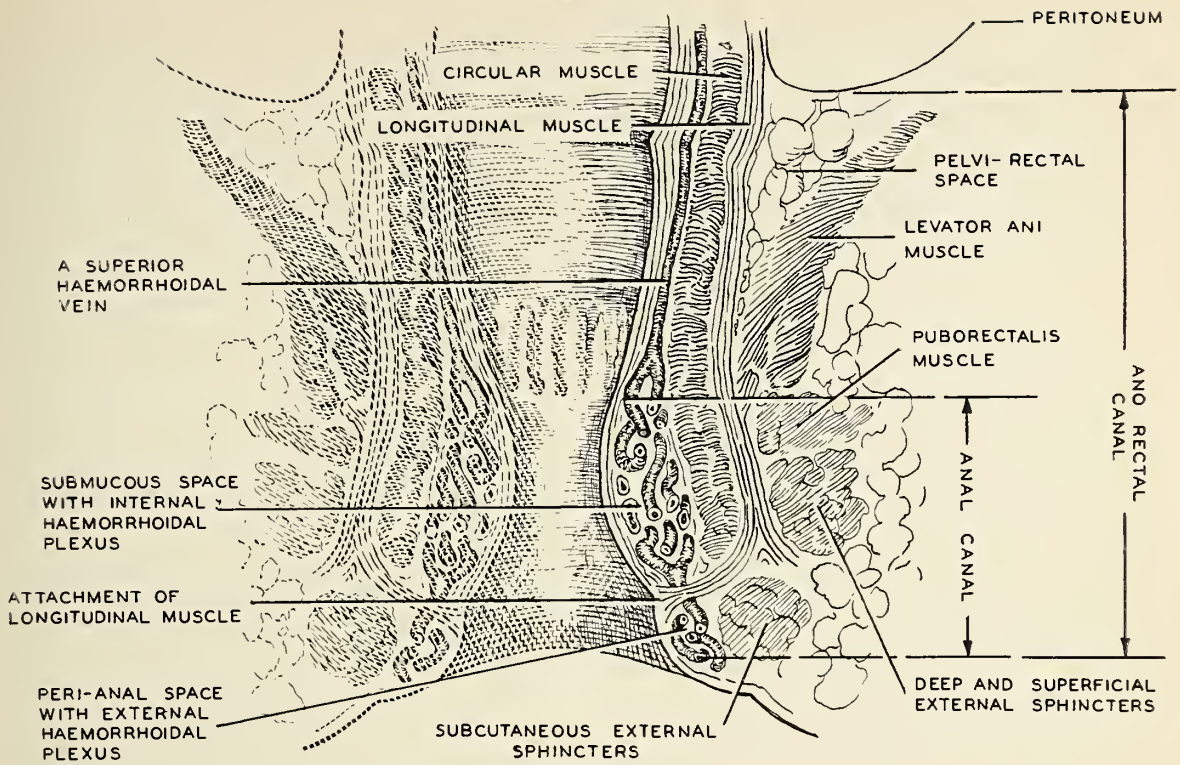
There has been a growing tendency to speak more of the anorectal canal rather than just the anal canal. (See Figure I.) By the anorectal canal is meant that portion of the rectum and anus extending downward from the reflection of the peritoneum. This would include the lower part of the rectum. It is in this canal, just above the anorectal ring, that the hemorrhoidal plexus is found. There are three primary hemorrhoidal bundles—two on the right side and one on the left. In the event of a hemorrhoid formation, the rectal mucosa above the anorectal ring becomes redundant and a palpable longitudinal fold is formed which contains the main artery. This is called the "pile pedicle." There is an extension of the internal hemorrhoidal plexus, through the attachment of the longitudinal muscle of the rectum to the perianal skin, to form the external hemorrhoidal plexus. This is located in the perianal space and is the site of external thrombotic hemorrhoids.

The sphincter action of the rectum is obtained through the coordination of several muscles. As the sigmoid progresses into the rectum, the musculature becomes increasingly heavier. This culminates in the thick internal sphincters in the region of the anorectal ring. It must be remembered that this is a direct extension of the longitudinal and circular muscles which form the wall of the entire gastrointestinal tract. Therefore, it is subject to the peristaltic action the same as all the intestines. This serves to project and expel the stool as well as to serve as some sphincter action. In addition, we have the levator ani muscles which support the rectum. In addition, the pubo rectalis muscle, the deep and superficial external sphincters, and the subcutaneous external sphincter muscles all act for sphincter control.

Superficial and medial to the subcutaneous external sphincter, a circular band of scar tissue of varying thickness is sometimes found, known as the pectin band. This is of special importance in relation to anal ulcer and will be discussed more under that subject.

The anatomy of the anorectal spaces is generally well understood and will not be discussed at length at this time.

Figure 1



Diagramatic sketch showing approximate position of anorectal canal and anal canal. The pelvirectal space can be seen above the levator ani muscle. The ischio-anal space extends downward from the levator ani muscle to the skin. The small depression is shown in the anal canal, caused by the attachment of the longitudinal muscle. This longitudinal muscle, as well as the circular muscle forming the wall of the rectum, are the same two muscles found throughout the entire large bowel. This is important because peristalsis is present all the way down to the attachment in the anal canal.

Cryptitis and Papillitis

Because of the close relation between these two conditions, they will be considered as one. Seldom do we see a true cryptitis without a coexistent papillitis, and the reverse is equally true. This is one of the most important subjects in the study of the pathological conditions of the rectum because it is the starting point for much of our infectious anorectal pathology. It can be the first step in the development of abscesses, fistuli, anal ulcer and even hemorrhoids. The crypts of Morgagni were discussed as being located at the anorectal ring. Between them are the small projections known as the papillae. These crypts are like pockets, inasmuch as there is a superior opening but no dependent drainage. This makes an ideal lodging place for any foreign bodies, such as small seeds or even larger seeds. It is not too uncommon to find a crypt containing an orange seed. Furthermore, they lie just over the sphincter musculature. Above them is the plexus of veins which forms the internal hemorrhoids and below them the level of external hemorrhoid development. Therefore, they are subject not only to the most active sphincter contractions, but also to the most marked vascular changes. They can be irritated by a constipated stool or the persistent, irritating stools of a diarrhea. The bacteriological study of the contents of the crypt may sometimes show many types of bacteria, ranging from the gonococci to the ova of intestinal parasites.

The symptoms produced by a papillitis or a cryptitis will vary with the amount of involvement. Pain may be very sharp and acute if the wall of the crypt has been torn to form an early anal ulcer. Sometimes the pain is only that of a dull, aching sensation. All cases of pruritis ani should have the crypts investigated. Many times a mucopurulent discharge may be noted coming from a crypt. A hypertrophied papilla may serve as a constant source of irritation at the pectinate line. The distress can be acute. Certainly it is disturbing to the patient. These papillae can sometimes become so large that they project from the anal canal.

Diagnosis must be made with the combined digital and speculum examination. There is almost always an associated sphincter spasm. The hypertrophied papillae can sometimes be confused with a pedunculated polyp. An inflamed crypt usually feels hard, somewhat thickened and sometimes granular. The area of inflammation surrounding the crypt and papilla is usually tender to palpation. If the examination is too painful, the exam-

iner should not hesitate to infiltrate the sphincter with 10 cc. of either 1 per cent novocaine or an oil preparation of novocaine. This will produce the necessary relaxation for adequate exposure. Anoscopy will reveal an inflamed crypt, reddened and thickened. Sometimes it is already ulcerated. The posterior midline is the predominant site of cryptitis. An inflamed papilla is edematous and usually tender. Sometimes it remains quite thickened and elongated following the acute stage.

Treatment: Many cases will respond to hot rectal irrigations or hot sitz baths and regulated diet to prevent constipation. While mild cases will respond to this form of therapy, usually an effective permanent cure will not be achieved without adequate surgical intervention. If a surgical procedure is to be used, it is best not only to remove the crypt but also a small triangular area of skin beneath the crypt. This assures adequate drainage. The customary technique of using a bent probe to hook into the crypt is all right, but a curved hemostat grasping the crypt is just as satisfactory. Bleeding is usually not too severe. If it is, one ligature can be placed at the top of the excision. It is advantageous in many of these cases to do a pectinotomy at the same time because many of the patients develop a cryptitis as a result of a pectinosis. A dry, gauze wick can be placed in the opening for 24 hours if so desired. If a hypertrophied papilla is present, and it usually is, it can be grasped with a hemostat and excised with scissors. The snare-loop technique is very satisfactory, but not necessary. As a closing procedure, the operative area can be infiltrated with an oil preparation of novocaine.

Postoperative care usually consists of mineral oil, 1 ounce by mouth at bedtime, hot sitz baths several times a day, and regulation of the diet to eliminate fine seeds and fibers.

Perianal and Perirectal Abscesses

Pyogenic abscesses developing in the perianal and perirectal tissue space are of frequent occurrence. As mentioned previously, cryptitis is usually the initial stage of abscess formation. The crypts are subjected to the sphincter muscle action at what is already the site of the greatest narrowing in the large bowel. In addition, these crypts, because of delicacy of structure, are predisposed to injury. This region of the bowel, which is the mucocutaneous junction, is also the most sensitive, and the passage through it of hard, irritating material in the bowel movement results in involuntary contraction of the sphincters. Injury in this area is, therefore, common. Abscesses may start by other methods, such as fecal impaction, perforation by sharp, foreign bodies, direct extension into lymphatics, rough manipulation during instrument examination, labor with its resulting strain, and direct extension from infection in some adjacent viscus. The presence of a chronic fistula in ano invites the development of perirectal or ischiorectal abscesses, due to spreading of the infection to new areas when drainage from the fistula is impeded. Extension from the skin is rare. Furuncles and even carbuncles can develop in the perianal skin, but extension to the ischiorectal space is rare. Ischiorectal abscesses rarely develop from hemorrhoids, but a submucosal abscess can develop following the injection treatment.

We can classify abscesses either on an anatomical or etiological basis. The anatomical classification is the most practical. In this paper only the more common abscesses will be discussed. Generally, we can classify abscesses as either being above or below the levator muscle. Below we find the ischioanal space or the infralevator abscesses. Above the levator muscle we find the pelvirectal space or the supralevator abscesses. The symptoms are different and the treatment necessarily different.

The infralevator abscesses, sometimes termed ischio-anal, are the same as were previously called ischiorectal. This abscess is found in the fossa between the external sphincter muscle, the levator ani muscle and the obturator internus muscle. Anatomically, therefore, this space is ischio-anal rather than ischiorectal. The etiology is generally an extension from a cryptitis. This extension may be direct or through the lymphatics. The pathogenesis is usually that of a subcryptic abscess which ruptures into the ischio-anal space. Other abscesses may, of course, extend into this fossa. Symptoms of an ischio-anal abscess includes the traditional symptoms of abscess anywhere. There is local pain, throbbing in character, accompanied by sweating, chills, rise in temperature, leukocytosis, anorexia and pallor. There is nearly always a tender area lying lateral to the anus. Sometimes, in the beginning, no localization from the abscess can be determined from the outside. A digital examination of the rectum may be of aid. Fluctuation appears later. Lateral extension can be either anterior or posterior. In either case, the opposite ischio-anal space can become involved. Subsequent rupture of this type of abscess results in the formation of horseshoe fistula. If the abscess extends downward it ruptures through the skin and a complete fistula is formed.

Treatment is simple: adequate incision for proper drainage of the abscess cavity, with insertion of a small packing or drain. It must be remembered that opening the abscess will create a fistula. The incision, therefore, should be so placed near the anus that the resultant fistula will be as short as possible. For this purpose, a radial incision should always be made, rather than a circular incision. The incision should be carried down to the external sphincter muscle. It is not generally considered good judgment to complete the excision of the fistulous tract through the muscle at the time the abscess is opened. However, I have done so on a few occasions where the internal opening

was large and readily apparent. There have been no ill effects from such a procedure. This procedure saves the patient one operation. If the induration is too great, so that sphincter control might be impaired, there should be no attempt at fistulectomy. It is always well in such cases to explain to the patient that a second operation will be necessary.

Adequate analgesia can be obtained with novocaine. Local infiltration of novocaine is generally not recommended when too much induration and fluctuation is present. However, there are no ill effects when it is used. Many times it is desirable to open an ischio-anal abscess in the office. This is especially true if a second operation for fistula will be necessary. The incision should be adequate to insure good drainage. The cavity should be explored digitally and all pockets broken down. After the necrotic tissue has been removed, the cavity is loosely packed with iodoform gauze. This packing is changed daily and the cavity irrigated with some solution such as zephiran chloride 1-5000 dilution. Hot sitz baths are permissible. Mineral oil, 1 ounce, is given at bedtime to alleviate constipation. Care must be given to insure healing by granulation from within outward.

Supralevator abscesses present a different picture. They develop in the pelvirectal space. This space is between the levator ani muscle, the rectal wall and the peritoneum. Abscesses here may form as a result of direct extension from an ischio-anal abscess through the levator muscle, or a direct extension from a crypt infection. An occasional proctitis with ulcer formation may provide the portal of entry. The symptoms are usually ill-defined. The pain, when it is present, is deep seated. Sometimes there is only a sense of fullness or heaviness within the pelvis. The pain might be referred to the lower left or right quadrant of the abdomen, which is sometimes confused with a salpingitis or even appendicitis. There is a certain amount of peritoneal irritation present which further confuses the picture. The classical symptoms of elevated temperature, chills and malaise are usually present. Diagnosis is difficult. If the patient has had previous rectal pathology, this may serve as some clue. Rectal examination in the early case is not conclusive. A later examination will reveal an induration or a bulging in the rectum at a high level. Occasionally this abscess will spontaneously rupture into the rectum.

Treatment is, of course, incision and drainage. Incision can either be made through the rectal wall at the site of the bulge, or through an incision parallel to the rectum. If the incision is made parallel to the rectum, dissection must be carried upward to the levator ani muscle. It is then carried through the muscle by blunt dissection into the abscess. A large incision into the levator ani is not necessary. A cigarette drain is inserted into the abscess cavity. Caution is necessary that the peritoneum not be perforated. This drain is removed within 48 hours and the cavity irrigated. A small packing is usually kept in the opening to prevent the growing together of the skin edges. This does not need to be more than several thicknesses of gauze. If healing does not occur, a fistulous tract has formed which extends from the internal opening of the fistula, which is usually at the mucocutaneous junction, both upward to the pelvirectal space and downward to the skin. This type of fistula is difficult to manage. Analgesia can be obtained by local novocaine. Caudal or nitrous oxide will sometimes be desirable.

Occasionally an abscess will be found in the retrorectal space. This is between the rectum, the coccyx and sacrum. Symptoms are similar to those produced by a pelvirectal abscess. Diagnosis is based upon digital examination. Treatment is incision and drainage. The incision is in the posterior midline parallel with the posterior fibers of the external sphincter muscle as they converge to reach the coccyx. Blunt dissection is used to reach into the retrorectal space. A drain tube can be inserted. This, too, can be done under local anesthesia with novocaine. The other types of abscesses will not be discussed. Importance of adequate drainage and proper incision of rectal abscesses can not be overestimated. The eventual healing and the length of time required depend on the successful handling of the first stage.

Anal Ulcer

Anal ulcer, sometimes called fissure in ano, is a radial tear in the tissue extending downward from the pectinate line. This must not be confused with simple anal abrasions which are not too painful and heal rapidly. The pathology of a true anal ulcer is very distinct. The term ulcer applies more aptly than simply the term fissure because, pathologically, it is an ulcer with characteristic undermining of the edges plus the grey, unhealthy base. The most common location is in the posterior midline. Some ulcers are found in the anterior midline and occasionally on the lateral wall. Anterior ulcers are more common in women than in men.

This is a common proctological lesion. It arises generally from an infection of a deep crypt with spontaneous ulceration of the thin wall or a tearing due to hard feces. They are most commonly located in the posterior position because of the anatomy of that portion of the rectum. For one thing, the rectum at that point joins the anus at a right angle which throws the greatest strain against the anus posteriorly. Also, the Y-shaped divergence of some of the fibers of the external sphincter, in their course of attachment to the coccyx, makes for a weak area in the direct midline posteriorly. The importance of its relation to cryptitis must be emphasized.

Most anal ulcers of a chronic type will be found to be associated with a sentinel pile on the outside and a hypertrophied papilla internally. The anal

ulcer lies between these. It is usually surrounded by scar tissue which is firmly adherent to the external sphincter. The base is generally an indolent grey color; the mucous membrane around the sides is frequently undermined. Edema of the external sphincter muscle may cause the sphincter to appear hypertrophied. Spasm, if it is not present, will develop upon attempts to examine the patient. The acute ulcer will present a shallow, bright red surface. Generally no induration of the surrounding tissue will be present if the ulcer is seen early enough.

There are three lesions which cause pain in the anal region: acute thrombosed hemorrhoids, either internal or external; acute abscesses; and acute anal ulcers. Pain is almost always, therefore, a predominant symptom when anal ulcers are present. It is most marked with a bowel movement, gradually subsiding thereafter. Because of reflex spasm, constipation may become a factor. Occasionally pain will become persistent in nature. Diagnosis can be made early by examination. In order to do this it is sometimes necessary first to anesthetize the sphincter muscle with 1 percent or 2 percent aqueous procaine. When the sphincter is completely relaxed, painless examination may be performed.

Treatment will depend on the stage of the ulcer. In the relatively acute stage, the ulcer base can be floated on a bed of 5 per cent quinine and urea hydrochloride. This will cure permanently a certain percentage of cases. Sometimes simple injection of the sphincter and the ulcer bed with oil soluble anesthetic solution will suffice. If the ulcer borders are found to be indurated or if the sphincter resistance indicates the presence of a thick pecten band, permanent cure can be obtained only by an excision operation. This operation can be one of two types: first, by a clean incision through the ulcer bed, the pecten band, and external sphincter muscle. This technique is very satisfactory for posterior ulcers where no sentinel piles or hypertrophied papillae are present. If the ulcer is anterior, the incision should be carried only half way through the external sphincter muscle. If a sentinel pile or hypertrophied papilla is present, a second method should be done. Here the incision should be started about ½ inch below the sentinel pile. The sentinel pile and perianal skin are then dissected upward on each side of the ulcer, completely removing the sentinel pile, the edges of the anal ulcer, and upward to include the hypertrophied pappillae. One suture can be placed above the hypertrophied pappillae before the dissection is started to control bleeding. This excision, including the perianal skin, will permit adequate drainage. Next, a radial incision should be carried through the pecten band and the external sphincter muscle if the ulcer is posterior. It is carried only half way through the external sphincter muscle if the ulcer is anterior. A single layer of gauze wick is then placed in the wound and permitted to remain there for 24 hours. The injection beneath the ulcer of oil soluble anesthetic produces prolonged sphincter relaxation and thus provides the needed rest period. Usually healing occurs within several weeks.

At this time, mention should be made of the condition known as pectenosis. Here we see the tight anal sphincter, which draws the opening up to a circle rather than a straight line. Constipation is usually present. Anal ulcers may be present, but not necessarily. This condition is relatively common and can be a clinical entity in itself. Certainly all cases of persistent constipation with difficult defecation should be examined for a pectenosis. Sometimes the pecten band and external sphincter muscle can be seen to be hypertrophied like a hard ring around the rectum. Digital examination will reveal an almost unyielding band. This condition responds nicely to oil anesthetic injection and pectenotomy. A mild divulsion of the sphincter muscle will be beneficial. The pectenotomy is a simple procedure. The perianal skin is incised by a radial incision. The pecten band can usually be found by its hard feel and shiny, glistening appearance. This must be cut completely through. The external sphincter muscle should also be cut completely through. A small, dry, gauze wick placed in the wound for 24 hours will prevent too early healing of the mucous membrane.

Postoperative care is very simple. One ounce of mineral oil by mouth at bedtime each evening will control any constipation. Hot sitz baths may be taken daily, or more often if desired. Healing is usually uneventful and complete.

Hemorrhoids

Generally, in the consideration of ambulatory proctology, it is assumed that the injection method of hemorrhoids is the only treatment of choice. As was stated earlier in the article, the conception of this term is meant to include the treatment of almost all rectal conditions. In the consideration of office treatment of hemorrhoids, naturally we think of the injection method. This method, however, can not be used in all cases. So the surgeon interested in doing rectal work in his office must be prepared to do hemorrhoidectomies. Both methods will be considered in this discussion.

Hemorrhoids are defined as varicose dilatations of the veins above or below the pectinate line. For practical purposes in the office we classify hemorrhoids only in the following manner: 1. Internal hemorrhoids, with *a.* protrusion or *b.* nonprotrusion; 2. External hemorrhoids, manifested by *a.* external varicosities, *b.* external thrombosis, or *c.* simple skin tags. In taking the history, therefore, we are interested in whether there is bleeding from the rectum and whether the hemorrhoids protrude. The latter is of special importance, relative to the injection method.

The history of a rectal case can sometimes be confusing. The patient should not be given the chance to state whether he is constipated or not, because sometimes he does not know what is meant by constipation. Therefore, it is better to question him concerning the necessity of laxatives. Many times it is important to know the size of the stool, yet most patients can not give an accurate history relative to this important matter. Bleeding is almost sure to be noticed and is a reliable criterion. It is always important to bear in mind the possibility of a malignancy higher in the colon. It should not be forgotten that the increasing constipation caused by a malignancy will, in itself, contribute to hemorrhoids. Therefore, almost all cases of malignancy have accompanying hemorrhoids. With this in mind, the wise proctologist will do a sigmoidoscopy even though the cause of bleeding from a hemorrhoid might be quite obvious.

Almost every adult has hemorrhoids. The two sexes are about even in frequency of occurrence. A hemorrhoid is pathologically nothing more than a group of dilated veins. They usually begin in the folds of Morgagni. The veins must pass through the circular and longitudinal layers of the rectum. Thus, contraction of these muscles with defecation compresses these veins and produces venous hyperemia in the mucosa and submucosa.

The diagnosis of a hemorrhoid is not difficult. Unless the hemorrhoid is thrombotic, it cannot be palpated; therefore, direct visualization is necessary. The simplest method of examination is with the patient on his side in a semi-prone position, the table flat, the left leg straight and the right leg crossed over. If the patient is told to look down toward the floor, the position of the buttocks will be such that visualization of the rectum is good. In the office, surgery is done in this position. The choice of a speculum will depend upon the individual preference of the examining surgeon. There are many speculums on the market, each having its own value. Sooner or later the proctologists will have all of them.

Hemorrhoids can be treated either surgically or nonsurgically. The choice will depend on the requirements of the indivdual case. Therefore, the surgeon should be entirely familiar with the possibilities of both methods of treatment. By nonsurgical treatment we mean the injection method. This technique is, of course, popular with the average patient. But the patient's wishes should not be the primary consideration if the hemorrhoid is such that it cannot be safely injected.

The criteria for hemorrhoids suitable for injection is rigid. First of all, the hemorrhoid must be an internal hemorrhoid. Any attempt to inject an external hemorrhoid will result in complications which are worse than the original disease. Also, the hemorrhoids must not prolapse with straining or defecation. This is not entirely a rigid rule because I have seen numerous hemorrhoids injected, with a relief of the prolapse. This is particularly true if the injection is around the complete circumference of the rectum. No thrombotic hemorrhoid should be injected. It is well not to inject hemorrhoids with a narrow base because this sometimes causes them to thrombose and assume the character of a pedunculated polyp. Injection method is particularly adaptable to patients in whom the general systemic condition contraindicates surgery.

Technique of injection must be carefully followed. The sclerosing solutions used are either 5 per cent quinine and urea hydrochloride or 5 per cent phenol in oil. Such solutions as sodium morrhuate or sylnasol solution should never be used. These solutions are very satisfactory for injection of varicosities in extremities, but cause complications such as sloughing and too much scar tissue when used in the rectum.

The choice of the rectal speculum should depend upon the desire of the operator. The Hirschman anoscope is very satisfactory. Personally, however, I prefer the Brinkerhoff. This is the completely slotted speculum which will permit the entrance of the hemorrhoid. The slide can then be gently pressed against the lower pole of the hemorrhoid to hold it in position. The hemorrhoid is then painted with some solution. Alcohol is satisfactory; however, I use aqueous ceepryn.

The site of injection will depend upon the size of the varicosity. The solution can be either injected directly into the hemorrhoid or through the mucosa above the hemorrhoid to sclerose the pile pedicle. In the event that the hemorrhoid has some tendency to prolapse, it is well to get at least one of the injections in this latter position. If quinine and urea hydrochloride are used, only 2 cc. are injected at one time. If phenol in oil is used, a sufficient amount is injected to cause blanching of the small vessels in the mucosa. There should be no pain to the injection. The hemorrhoid is injected once a week, although some operators prefer to inject all the hemorrhoids in one visit. I find it much more satisfactory to use the once-a-week technique. Three to five injections are usually required for each hemorrhoid.

There is another technique, which is to inject the complete circumference one quarter at a time, beginning at a high superior pole level, without regard to the location of the hemorrhoid. In this event, an entire quarter is injected at one time. This may require as much as 10 cc. of the phenol in oil. Upon completion of the upper level, a similar injection is repeated at a lower level. This method is very good and is more successful than others in the relief of prolapse.

If the injection is done properly, complications will not develop. If, however, it is too superficial or in an excess amount, slough may occur. In such event, injections should be discontinued until healing has occurred. Occasionally bleeding will occur from the injection site of the needle. This usually does not last long. It is more common to see such

bleeding with the use of phenol in oil than with quinine and urea hydrochloride. The patient is instructed to take mineral oil occasionally to alleviate constipation and to use sitz baths if pain should occur. This method of treating hemorrhoids is very successful if done properly and if the cases are selected.

The surgical technique for the removal of hemrhoids is no different in the office or in the hospital. There will always be discussions among surgeons relative to the various types of operations for hemorrhoids. I have heard some of the rectal men at certain teaching centers classify as a "quack" anyone who did not do a Whitehead operation for all hemorrhoids. If the operating surgeon is to limit himself to a Whitehead operation or any of its modifications, he is missing the opportunity of curing many patients with a minimum of postoperative discomfort. The able proctologist must be qualified to do several types of hemorrhoidectomies, as the individual case will dictate. In the office the simplest method is ligation and excision. This lends itself readily to local anesthesia with a minimum chance for hemorrhage and, if done properly, a minimum chance of scar contraction. The technique is well known. The anesthesia is accomplished by aqueous procaine and oil soluble anesthesia. Exposure can be obtained either by the use of allis clamps or a bivalve speculum. The hemorrhoid is grasped with a forcep and pulled down into the operative field. One ligature of chromic suture is placed at the superior pole. Dissection is started at the inferior pole and carried upward, being careful to stay superficial to the sphincter muscle. The suture is then tied around the dissected hemorrhoid to complete hemostasis. The hemorrhoid is then excised distal to the ligature. This method can be used on all hemorrhoids present. There is a minimum of after pain and adequate drainage for good healing. This method is applicable to internal hemorrhoids or combination internal and external hemorrhoids.

In the case of a thrombotic external hemorrhoid, it should be removed by excision rather than just incision. It is the same technique as used for the internal hemorrhoid, except usually no suture is required for hemostasis. The bed from which the hemorrhoid was removed will frequently ooze blood for a few minutes. It is very rarely that this bleeding lasts.

After care includes mineral oil at night, a low residue diet and daily hot sitz baths. It is well to see the patient in the office frequently after the second day. At this time all bridging of tissue which might tend to form and cause stricture should be broken up. The gloved finger is quite satisfactory though sometimes painful. An ordinary solid glass rod makes a very satisfactory instrument for such probing and exploring. The patient is more ambulatory than in bed. Many times he returns to work after a few days. A certain amount of odor does develop from the ligated stump. This will usually disappear by the tenth day. If the surgeon is properly equipped in the office, it offers an opportunity to the patient for a complete cure with little discomfort and less expense. Such a gratified patient wastes no time in sending his friends for a similar procedure. Such treatment as outlined, whether it be a case suitable for injection or whether surgery is required, is fundamentally sound and is good treatment.

Anal Stenosis

The most frequent of complications following rectal surgery of any type is stricture or stenosis. There is technically some difference between a stricture and a stenosis, in that a stricture is the narrowing of a lumen and a stenosis the narrowing of an outlet. Technically, therefore, we generally see a stenosis rather than a stricture following surgery. This is a particularly common complication of the Whitehead operation for hemorrhoids. It can best be prevented at the time of surgery by preserving as much of the perianal skin as possible. Also, the probing of the operative wound plus frequent dilatations will help prevent its occurrence. No attempt will be made to discuss the stricture and stenosis accompanying venereal diseases.

There is a definite syndrome which sometimes accompanies anal stenosis. The patient complains of constipation, nervousness and headache. Occasionally he feels that the stool has not been completely evacuated. If there is too much straining present, an anal ulcer or fissure may form. Occasionally the stools are watery in nature or pencil-shaped. Diagnosis is readily apparent upon digital examination.

Treatment depends upon the cause and the degree of the narrowing. Sometimes simple digital dilatation may effect a permanent cure. Dilatation at weekly intervals may be necessary in more advanced cases. Surgical intervention will be required if the condition is longstanding and will not yield to dilatation.

Surgical treatment is a posterior proctotomy. This is essentially no different than a posterior pectenotomy, except that sometimes more scar tissue is encountered. Operative technique is the same and the postoperative care the same. This will effect a cure in almost all such cases.

This is a relatively common condition and the resulting cure will be a great satisfaction to the patient. The first thought uppermost in his mind is the presence of cancer. Assurance that it is not malignant will in itself do much for the patient.

Polyps

The discussion of polyps will be limited to only the benign tumors, for it is only such tumors that

will be treated in the office. The classification of benign tumors will not be considered, but rather a broad study of the methods to be used in their removal. The actual structure of the polyp is not too important if it is benign. The differentiation between a benign and malignant tumor must depend upon the clinical judgment of the operating surgeon, and a biopsy if there is any doubt. Benign tumors may develop malignant tendencies. This is especially well demonstrated by the malignant degeneration occurring in cases of multiple adenoma. The question as to which part of the polyp is malignant may not be too important in consideration of the surgical procedure, because in all cases an attempt is made to get the entire polyp, pedicle and base.

For general consideration polyps can be classified as two types: pedunculated and sessile. The pedunculated type is the more easily recognized and the more common. They are quite frequently seen in children, sometimes being large enough to prolapse completely through the anal sphincter. The diagnosis is made very easily if the polyp is within reach of the examining finger. It should not be confused with a hypertrophied papilla. Occasionally the polyp is seen higher in the sigmoid during a routine sigmoidoscopy. Diagnosis is easily made at this time because the tumor and pedicle can be demonstrated.

The diagnosis of a sessile polyp is more difficult. It can occasionally be felt with the examining finger as a hard nodule, flat in character, and raised only slightly above the level of the rectal mucosa. If it is higher than the examining finger can reach, the diagnosis is more difficult because such a polyp can be easily overlooked during sigmoidoscopic examination. This type of polyp probably tends to malignancy more than the pedunculated type.

Symptoms of a polyp are not typical, in that a small adenoma may be entirely silent. Bleeding is the most common symptom. Constipation is a frequent complaint, sometimes associated with a sensation of incomplete evacuation of the bowel. Occasionally protrusion might be noted.

Treatment depends upon the type of polyp and the location. Certainly the solitary adenoma must be removed in every case because of the great frequency of malignancy. If possible, it is well to remove the tumor at the time of the examination. In general, the consideration as to the type of technique to be used depends upon: first, whether the polyp is pedunculated or sessile, and second, whether it is above or below the reflection of the peritoneum. In regard to the latter thought, the significance is that in many methods the polyp is put on a tension before a snare or fulguration is applied. If the tumor is above the peritoneal reflection enough of the peritoneum can be pulled up with the polyp to cause a perforation of the peritoneal cavity, with a resulting peritonitis. If the tumor is below the peritoneal fold, no structures can be damaged, particularly if the polyp is on the posterior wall.

A pedunculated polyp is very easily snared or fulgurated. The sessile type polyp may not respond to snaring, and fulguration alone might of necessity be the method of choice. In either event, the entire polyp and a moderate amount of surrounding tissue at the base should be removed. Generally speaking, very few complications attend such a procedure. Hemorrhage may occur five or ten days later when sloughing develops. I have found that so warning the patient at the time of surgery may sometimes save a midnight phone call. In most cases there are no important hemorrhages. The blood is usually dark in character, sometimes even clotted. Whenever possible the complete tumor should be given to the pathologist for examination.

Elaborate instruments are not necessary for the successful handling of a polyp. A tonsil snare, particularly of the screw type, is very handy for the polyp below the peritoneal reflection. They can even be combined with the electrocoagulating method by simply having the assisting nurse touch the snare with the electrode from a diathermy machine. The ordinary office diathermy machine will serve very satisfactorily for coagulation purposes. Special insulated tips can be purchased very reasonably. These are almost a necessity when a sessile polyp is to be fulgurated through a sigmoidoscope. For higher polyps which must be removed through a sigmoidoscope, the 16-inch biopsy instrument is also very satisfactory for grasping and crushing the pedicle. Here, too, fulguration can be obtained by touching the instrument with the coagulating current from the diathermy machine.

If bleeding is present from higher in the large bowel than the sigmoidoscope can reach, diagnosis of the lesion must depend upon a barium enema. Polyps are sometimes difficult to diagnose by x-ray. For this reason, the contrast enema is of greater benefit. When the growth is beyond reach of the sigmoidoscope it must be approached by a laparotomy and incision of the bowel wall. This is not an ambulatory procedure. The importance of diagnosing a polyp and removing it at the earliest possible time can not be over-emphasized. This is definitely a tumor which can undergo malignant degeneration, and to postpone surgical removal is but to invite more serious complications.

Summary

An attempt has been made to outline briefly some of the techniques which can be used in the office for the cure of some of the more common rectal conditions. The field is unlimited because of the large number of people having some type of rectal pathology. By early application of corrective meas-

ures, the patient can be saved much suffering and time lost from work. An attempt has been made to show that all rectal cases are not necessarily hospital cases. With hospital beds at a premium, such as they are today, it is well to utilize any method possible to treat patients properly in the office. The procedures outlined are practical and have been based upon actual cases handled in the office. With the possible exception of a young mother leaving the delivery room, no other patient is as grateful as a rectal patient who has been cured of his discomfort. To be able to do this without undue suffering or loss of time adds even more to the patient's gratitude.

THE MEDICAL REHABILITATION SERVICE IN THE VETERANS ADMINISTRATION*

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WASHINGTON, D. C.

WORLD War II laid the foundation for a new medical approach, out of which evolved a new concept of therapeutic practice. Manpower became a crucial problem, making necessary the return to duty of every possible soldier physically and technically ready to man the guns and fly the planes. Thousands of man-days were being spent by patients in hospitals in a convalescent stage of treatment. To speed recovery of these patients and to fit them for the strenuous demands of combat action, a convalescent training and reconditioning program was introduced. The physical condition of thousands of soldiers was vastly improved, and in many instances they left the hospital in much better condition than the average soldier on duty.

In one study a group of 645 virus pneumonia patients was observed. Fifty percent were given planned rehabilitation activities; the other 50 percent were treated in the routine manner. Those who received rehabilitation required 31 days of hospitalization; those who did not receive rehabilitation required 45 days—a difference of 14 days or 45 percent more hospital time. Among those in the rehabilitation program there was a recurrence rate of 3 percent; among those without the rehabilitation service there was a recurrence rate of 30 percent. During 1943 and 1944 there were hundreds of soldiers with rheumatic fever in Army Air Forces hospitals in the Rocky Mountain area. Before a comprehensive rehabilitation program was instituted, 85 percent of these patients were given medical discharges. After rehabilitation was instituted, only 15 percent were lost through medical discharges. In addition to these studies, other evidence continued to pile up to show that a carefully planned and controlled program of convalescence could materially reduce hospitalization and return a greater number of individuals to active duty.

Out of this wealth of experience during World War II came a new concept of medical care, the Third Phase of Medicine, the first phase being Preventive Medicine and the second phase Diagnosis and Treatment. This concept is based on the principle that what happens to the patient after he becomes afebrile and other acute symptoms disappear is of direct concern to the physician. It is concerned with the patient from the time he leaves the bed until he returns to his job. First, such a direct medical plan reduces readmission. Secondly, the reintegration of the patient into normal living is facilitated.

A medical rehabilitation service for veterans hospitals was created by General Omar N. Bradley and Dr. Paul R. Hawley for the purpose of putting these principles into actual practice involving the operation of 129 hospitals caring for more than 109,000 patients. A doctor of physical medicine, as overall chief, directs the Medical Rehabilitation Services in the hospitals. Physical therapy, occupational therapy, corrective physical rehabilitation, manual arts therapy, and educational retraining complete the therapeutic team, and provide an integrated approach to the total needs of the patient.

In one VA hospital in a recent three months period 100 patients completed a course in educational retraining, receiving high school diplomas. Through a manual arts therapy program the patient is provided five or six basic shops in which he may obtain basic instruction and explore the

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* Presented before a joint meeting of the Delaware-Blackford County Medical Society and the Society for Crippled Children and Adults, at Muncie, on March 18, 1947.

‡ Formerly Assistant Medical Director, Medical Rehabilitation Service, Department of Medicine and Surgery, The Veterans Administration; at present Associate Professor of Rehabilitation and Physical Medicine, New York University College of Medicine, and Clinical Director of Institute of Rehabilitation and Physical Medicine, New York-Bellevue Medical Center.

possibilities of various occupations. He may start such therapeutic instructions as watch repair in the hospital and continue it upon discharge under the GI bill.

Medical rehabilitation boards, including representatives of the aforementioned services, supplemented by the vocational and training officer, are established to deal with difficult cases. Such a medical rehabilitation board recently provided some very interesting results in the veterans hospital at Minneapolis, Minnesota. Under the direction of a neurologist and a doctor of physical medicine, this board planned and carried out a special program for the rehabilitation of 130 neurological patients. A great many of these patients were well past middle age, many were veterans of World War I or the Spanish American War. The board in this hospital inaugurated what they termed a "total push" program, utilizing all of the phases of the Medical Rehabilitation Service, Social Service, and other departments of the hospital to solve the problems of these difficult, long-term cases. Of the 130 patients admitted to the rehabilitation service in the Minneapolis hospital, 25 so far have been completely rehabilitated and are now self-supporting; 40 more have been returned to home and community—capable of doing some work but not fully self-supporting; 30 more are up and about, enthusiastically working on their rehabilitation with a new outlook; 25 others have achieved a degree of self-care which enables them to care for most of their personal needs and to lighten greatly the load of the hospital staff; the remaining 10 have been unable to leave their beds, and to date the efforts for this small group have been unsuccessful.

Today, as a result of recent developments, sulfonamides and other drugs, as well as new surgical procedures, some 2,000 American veterans with spinal cord injuries, most of whom would have died in World War I, are not only living, but with the help of this new rehabilitation program are being taught to make a living.

Patient (A) provides an interesting and reasonably typical case history: This veteran, age twenty-six, was injured in January 1944 in New Caledonia. The injury was at the level of the twelfth thoracic vertebra. He underwent a laminectomy on the same day of the accident, which revealed that the cord, while intact, was contused. A second laminectomy, performed in October 1944, revealed an adhesive arachnoiditis. He had a urethral catheter for five weeks and then developed an automatic bladder. Physical therapy was begun in the Navy hospital and later continued extensively in the veterans hospital to which he was transferred. The physical therapy procedures were supplemented with appropriate activities in occupational therapy including weaving and carpentry work. As soon as medically feasible, he began corrective physical rehabilitation exercises on mats with dumbbells, and instruction was initiated in the use of braces and in crutch walking. As a result of the special instruction in the swimming pool, this patient eventually was able to swim for one mile without interruption, which gives some insight into the degree of physical capacity which he was able to develop. In September 1946 the patient was enrolled in education and educational psychology at a leading university in California. Upon completion of his education, the patient is planning a professional future as a psychologist. At present his schedule embraces six hours a week at the university; this will be increased to twelve hours per week in the following semester, upon the recommendation of his physician. In the meantime, his work in physical therapy and corrective procedures is being continued at the hospital. The patient is largely independent; he is able to take care of all the activities inherent in daily living, owns his own car, which he drives to school every day, a distance of eighteen miles.

Patient (B) likewise is a spinal cord injury case, age twenty-three, with a fracture of the twelfth thoracic vertebra, sustained in Germany in April 1945. A laminectomy was performed in May 1945 at an evacuation hospital in Germany. Two weeks later he underwent an operation for a suprapubic cystotomy in a general hospital in England. After evacuation to the United States he was admitted to an Army general hospital and from there was transferred to a veterans administration hospital. This patient also was given extensive physical therapy treatment. A large decubitus ulcer on the sacrum was closed by post stamp method and has remained closed. Another, at the iliac spine, was closed by suture at the same time. A sore over the left trochanter was closed in October 1945 but was a failure and was reclosed in January 1946. The right trochanter sore was closed six weeks later and remained closed. This patient entered into a great variety of occupational therapy work, including leather, jewelry and other crafts. At the same time a vigorous corrective physical rehabilitation program was started, to lead the patient into crutch walking. Today, with the use of long leg braces, a pelvic band and crutches, he is an excellent walker. The work in occupational therapy led the patient into more advanced but related fields in the prevocational shop retraining program. As a result, upon discharge from the hospital, this patient was employed in the hospital brace shop, where he evinced great skill in welding and leather work and, in addition, has demonstrated considerable administrative ability in the management of the shop.

The Department of Medicine and Surgery in the Veterans Administration has made special plans for the deaf and the hard of hearing. It has been estimated that 10 percent of the population of the United States is in need of some degree of professional guidance in regard to defective hearing. The sequelae of infection account for the large majority of adult deafness. Some of these cases can be relieved; however, most of them must go through

life without better sound perception. They are in need of professional attention so that they may utilize the hearing acuity which remains, rather than continue with futile attempts to restore what has been lost. An aural rehabilitation program requires professional guidance. The otolaryngologist and audiologist are assisted by the acoustic-physicist, auditory trainer, hearing aid specialist, clinical psychologist, speech and lip reading teacher, and speech pathologist—all of whom contribute their important knowledge in the final effort to restore the veteran's ability to communicate with the outside world of sound. Three centers, located in New York City, St. Louis, and Los Angeles, have been authorized by the Veterans Administration for furnishing this specialized aural rehabilitation service. This work is further augmented through the use of the United States Army Medical Center in Washington, D. C., and the United States Naval Hospital in Philadelphia. In addition, contract arrangements with leading universities and other approved institutions are making it possible to bring certain phases of this specialized work nearer to the veteran's home community.

Those veterans who lost their sight during World War II received, probably, the finest training and orientation from the Army and Navy which has ever been afforded any blind group. As the men have left these training centers, the Veterans Administration has undertaken to continue similar orientation and assistance which would prevent deterioration of the veterans as they entered new pursuits in civil life. Two matters received early attention: The first was a program whereby trained orientation counselors could visit the veterans in their homes to continue where the services of the military hospitals had left off, to aid the blind veteran in getting about unaided in his new environment, as well as assisting him in emotional and other adjustments. The second was to improve the type and quantity of special aids and equipment which could be provided by the Veterans Administration. The next step in the rehabilitation program for the blind is to vitalize the work being done in the present blind centers and homes.

In the care and treatment of the tuberculous patient, carefully controlled bed rest is still of prime importance. The sharp physical limitations imposed by this disease require that rehabilitation efforts take into consideration every possible phase of the patient's hospitalization and even his post-hospital life. For this reason, the goal in the rehabilitation of the veteran with tuberculosis is to so prepare him physically, mentally, and otherwise that he may eventually return to a useful, productive life in his home community and to a job with physical demands which fall within his capacity.

I believe you are aware of the immensity of the problem connected with the care and treatment of the neuropsychiatric patient. For these cases, representing 55 percent of our hospitalized population, the Medical Rehabilitation Service emphasizes activity in occupational therapy, corrective physical rehabilitation and in manual arts therapy. In a New England hospital recently, a group of 13 psychotic patients who had a reasonably favorable prognosis for eventual rehabilitation was taught certain fundamentals in sewing and weaving. Over a period of about seven months, 12 had progressed sufficiently to leave the hospital. Positions were secured for them in textile mills in which the patients could utilize the skill they had acquired at the hospital. To date all 12 of these veterans are still employed and are making a highly satisfactory adjustment.

Forty-four patients are taking educational courses in one of our large neuropsychiatric hospitals. Of these, 39 are diagnosed as psychotic patients and 5 are psychoneurotics. The courses which they are pursuing range from business subjects through foreign languages, mathematics, science, and mechanical drawing. Favorite subjects appear to be typing and English. Instructors report good progress in the work of the majority of these patients. Most important, it has served as a medium for stabilizing these individuals, for fixing their attentions upon an objective sphere entirely outside themselves, thus aiding materially in their recovery.

Selected convalescent hospitals are being established by the Medical Rehabilitation Service of the Veterans Administration. These will offer all the physical facilities, personnel and services which can be constructed in one institution for the special care and rehabilitation of the seriously disabled. Actually the problems of the Veterans Administration in this field are small compared to national problems. Prior to World War II there were 23,000,000 Americans handicapped by disease, injury and former wars. Each year 350,000 Americans are actually handicapped by accidents alone. In the United States there are 90,000 beds devoted to the care of tuberculosis patients at a cost of $100,000,000 annually. One-half of these 90,000 beds are occupied by persons who have been treated before, suffered relapses, and were readmitted to the hospital. These figures can be improved radically by a carefully planned rehabilitation method.

Now as to the costs of rehabilitation: Prior to rehabilitation efforts the average wage earnings of a group of 44,000 handicapped persons reported by the Office of Vocational Rehabilitation of the Federal Security Agency were $148 per annum. As the result of planned rehabilitation the average wage had skyrocketed to $1,768 per annum, all of which was accomplished at an average cost per case of $300, the approximate amount it would have cost charity to support them.

Conceived and endowed by Mr. Bernard M. Baruch, the Baruch Committee on Physical Medicine was created in 1944. Through this far-sighted plan, leading medical schools throughout the United States received funds to establish research and training centers in which physicians might be

trained in the scientific aspects of physical medicine and medical rehabilitation, with facilities to pursue clinical studies and research for the improvement of techniques and the creation of new medical knowledge. In addition, actual plans were developed through which civilian communities could establish their own rehabilitation centers, specifically designed to meet local needs and within the reach of all. One such center already is in the process of organization, and numerous other American cities are going ahead with plans for development. One of the largest medical schools in the United States recently established a Department of Physical Medicine and Medical Rehabilitation, directed by one of the nation's outstanding physicians in this field. Blueprints have been drawn which show the way for various size communities, in order that this work may be adapted to individual needs in each case.

More and more physicians are realizing the necessity of expanding a Third Phase of Medicine under medical direction, if we are to restore the millions of handicapped to their communities as useful, productive and self-sufficient members.

MATERNAL MORTALITY STATISTICS

IN 1947 the maternal death rate in the United States (1.3 per 1000 live births) was 80 per cent less than in 1932 (6.3), and 75 per cent less than in 1937 (4.9).

In 1932 there were 13,293 mothers lost through childbirth; in 1937 10,769; and in 1947 4,800 (an approximation based upon the incomplete returns of the first six months of 1947). The markedly lowered number (4,800) in 1947 occurred notwithstanding there were 60 per cent more babies born in 1947 (3,720,000—approximate) than in 1937 (2,203,337).

In 1947 the maternal death rate in Indiana (1.2 per 1000 live births) was 75 per cent less than in 1932 (5.7), and 60 per cent less than in 1937 (3.5).

The number of maternal deaths in Indiana in 1932 was 302; 1937, 195; and in 1947, 112. The creditably lowered number (112) in 1947 occurred even though there were 70 per cent more births in 1947 (96,631) than in 1937 (56,087).

The maternal death rate is less in Indiana than in the United States as a whole, being 1.2 and 1.3 respectively per 1000 live births.

These very gratifying reductions have resulted from increasing mutual and unrelenting interest on the part of the lay public and the medical profession.

The lay public has expressed its interest chiefly by publicity through public lectures, free literature, press, and radio; and by seeking adequate obstetrical care.

The profession has improved its obstetric judgment and skill, and has stressed the importance of efficient preconceptional, prenatal, delivery, and postnatal care—the latter extending over a period of one year. Its achievements have been greatly aided by the more general hospitalization of childbirth cases, the freer use of blood transfusions, and the employment of such newer drugs as penicillin, the sulfonamides, and streptomycin.

The present maternal mortality rate in this country is by far the lowest of all times. *Today it is four times safer for a mother to have a baby than ten years ago.*

Each year the annual report from the Federal Vital Statistics Department on maternal deaths is incomplete and delayed more than a year. When the general interest in maternal welfare becomes as keen as the tabulation of votes following a national election, such data will be available within twenty-four hours.

Submitted by C. O. McCormick, M.D.,
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THE JOURNAL'S PLATFORM

1. **Preservation of American Medicine through voluntary service to the sick.**
2. **Advocating full-time county or district health officers, locally appointed.**
3. **Restoration and preservation of our natural waters and resources.**
4. **Maintain the present high standard of the Indiana University Medical Center, combining the full medical course in Indianapolis.**
5. **Elimination of diphtheria and smallpox through immunization and vaccination.**
6. **Support of the state-wide campaign against undulant fever.**

Editorials

THE COST OF MEDICAL CARE

DATA on consumer expenditures by Americans during the war years have recently been brought more nearly up to date by the release of the details for the year 1946. An advance release of information on such expenditures for the year 1945 was made by the U. S. Department of Commerce. These data were the basis for an exhibit at the Atlantic City session of the A.M.A.

Since that time complete releases by the Department of Commerce have enabled the Bureau of Medical Economic Research of the A.M.A. to publish comparative figures concerning the cost of medical care for the period 1929 to 1946 inclusive. Frank G. Dickinson, Ph.D., Director of the Bureau, has analyzed the medical expense totals and has compared them with other items of consumer expenditure such as alcoholic beverages, recreation, personal care and jewelry. These items were selected for comparison because their totals are approximately of the same magnitude as that for medical expense.

As would be expected, the absolute cost of medical care has risen in common with costs of commodities and services. The total medical cost averaged 2.6 billion dollars during the period 1935-1939, and in 1946 the total cost was 5.6 billion dollars. The amount for physicians' services has risen from 0.8 to 1.4 billion dollars for the same years.

However, when the rate of increases is calculated by comparing present levels with those of the base period 1935-1939, it is apparent that the cost of medical care in 1946 represents the slowest increase of the entire series. If the expenditures of 1935-1939 are considered as 100 per cent, the total cost of medical care in 1946 is 211 per cent, physicians' services is 179 per cent, and hospital cost is 200 per cent; this in comparison with the outlay for alcoholic beverages at 277 per cent, recreation

253 per cent, personal care 253 per cent, jewelry 408 per cent, and particularly as compared with the total of all consumer expenditures at 228 per cent.

It is significant that the greatest increase was in the item of jewelry, and "that the slowest moving item in the series, that is, the one that increased most slowly in every single year was the cost of physicians' services." To quote Dr. Dickinson further: "Thus it can be concluded from these figures published by the U. S. Department of Commerce that during this particular period of twelve years the amounts the American people paid for physicians' services increased less rapidly than any of the other items used in this group of selected expenditures."

The same impression is gained by studying the relations of the medical expenditures to the entire income of the American people. The total medical care cost, which between 1935 and 1939 represented 3.8 per cent of the adjusted personal income, in 1944, 1945 and 1946 had fallen to 3.3 per cent. Likewise, the cost of physicians' services was reduced from 1.2 per cent to 0.9 per cent and the cost of hospitals fell from 0.7 per cent to 0.5 per cent of the personal income.

It is particularly significant that at a time when the health of the American people is at an all-time high, when life expectancy at birth is in the neighborhood of 67 years, when more and more people are being cared for in hospitals, and when the costs of the many new drugs are necessarily high, the cost of medical care as measured in terms of national income and national expenditures is actually on the decrease.

THE HEALTH WORKSHOP

RATHER an interesting title, this, but at the same time a most interesting subject, for we all, both physicians and the lay public, are fast becoming "health-minded." Time was when matters of health were discussed only by members of the medical profession—today we have a score or more of organizations interested in the same subject.

The "Health Shop" idea originated a few years ago and for the past four years such an institution was operated at Bloomington, under direction of the Indiana State Board of Health and the Physical Education and Recreation Department of Indiana University. Since that time four or five of the various state health organizations have participated. This is the first year that the Indiana State Medical Association has been asked to participate. Ray E. Smith, executive secretary, has so advised all county medical societies, but the matter is of such importance that we deem some editorial comment should be made on the subject.

The "Work Shop" plans a session covering a matter of two weeks, to be held in Bloomington, August 13-27.

Arrangements have been made for the housing of all participants by the university, at a nominal rate. Meals will be available in nearby eating places, as well as the Indiana Union, which conducts a cafeteria.

Full details of the two-weeks program may be had from Dr. R. W. Patty, dean of the Indiana University School of Health, at Bloomington, or Mr. Robert Yoho, of the Indiana State Board of Health, Indianapolis.

As we have said, this is not a new experiment, the August session being the fifth of an annual series. The "instructors" will be from a list of those nationally known for their ability in their respective fields.

"Clinics" will be conducted, showing just how various problems are to be handled, and to anyone interested in such matters it would seem that the "Health Work Shop" is the answer to many health problems confronting us today.

We are more than pleased that the state association has had a formal invitation to join in this project; for some years there has been criticism that the medical profession, per se, has too often been "neglected" in such programs.

It would seem that here is an excellent opportunity for physicians who plan to take up Public Health as their life's work to make first-hand observations of just what is going on in Indiana. In fact, we unhesitatingly commend the plan and trust there will be a large attendance for the full session.

TIME FOR ACTION

IT seems that every two years, along about the time the Indiana General Assembly meets, we are put to it to defend our medical practice laws. It appears that 1949 will be no exception to this rule, since we are advised that there will be a drastic effort made to break down the laws that have been in force since 1937—the medical law written by the late William Niles Wishard, Sr., of Indianapolis.

Our drugless friends, though they took the worst "beating" in many years, in 1947, now are planning a new attack; they are trying to enlist a national organization under their banner. All this comes at a time when we had felt we were rather firmly intrenched, what with the support of the press and of all thinking people.

Public health never before has been so prominently before the American people as today; most every citizen knows what it is all about and knows what it means. American Medicine is better understood than at any time in years past—most everyone knows what we are trying to do about disease

control—what our plans for the future contemplate.

Our various health organizations never were more active; we have plenty of publicity from the lay press and from the magazines—yet we have this biennial specter again confronting us. It means a real fight, this time, though we have been saying the same thing for years past.

It is inconceivable that the citizens of Indiana, or those of any other state, for that matter, will lend themselves to any program that seeks to undermine the health program now in effect. But apparently that is just what is before us.

There are several solutions to the problem, the chief one being to see to it that *your* representation in the 1949 General Assembly is in favor of a continuation of our present health program. Yes, we know of the unusual political angle that just now prevails in Hoosier politics, but we ask you to lay all things aside when it comes to the selection of members of the assembly. Vote for whom you please for Governor and all the other officers, but when you mark your ballot for legislators, be certain that you vote for Hoosier Medicine.

MORE KAADT COMMENT

THE Fort Wayne News-Sentinel, in a recent article, proceeds to make some comment on the conviction of the Kaadts, of South Whitley, in the Federal Court of that district. It is a most intelligent observation on the long trial and the final findings of the court. And, there is some comment that might well be taken seriously by the medical profession.

As the court said, at the time of rendering judgment in the case, there is no "cure" for diabetes. The management of this disease means a sugar-free diet, plus the intelligent handling of insulin.

The news article went on to say that by no means is the kind of "clinic" operated for so many years by the Kaadts common, yet there are too many instances in which medical laws are being flouted and that it is high time that the medical profession do a bit of house-cleaning.

Many other diseases lend themselves to the quacks, all of whom hold out false hopes to the victims. It is in these instances that the newspaper feels something should be done—and done now.

But far be it from *The News-Sentinel* to suggest that there should be any further intrusion of the Government in such matters, "but there ought to be a quicker way to detect and terminate the malefactions for which the Kaadts were convicted. Comes the day when Uncle Sam's approval must be stamped on the prescription order, Hippocrates' spirit will return to haunt an ancient and honorable profession."

The paper suggests that the State Medical Board and the Federal Food and Drug Division "get on the ball" a bit sooner. In the present instance the prescribing of vinegar and saltpeter had gone along for too many years, without let or hindrance.

Then, too, if the medical profession finds even a tiny spot of "dirt" therein, that spot should be at once completely and irrevocably swept out. Medicine must, in the opinion of this newspaper, keep a clean house, with which notion we are in entire accord.

Editorial Notes

Dr. Max A. Bahr, long-time head of Central State Hospital, Indianapolis, recently was titled by a local newspaper as "Dean of Indiana Psychiatrists." Well, why not; so far as we can remember he is the oldest, in point of service, of Indiana's psychiatrists. More than fifty years ago, while we were still in medical school, Doctor Bahr, then a young man, was on the staff of the late Dr. George F. Edenharter, who had been superintendent for several decades. Hence we see no reason why Doctor Bahr should not be accorded this new title.

With the "Big Show," the annual session of the American Medical Association, a matter of record, we now turn our attention to the annual pow-wow of our own state association, come next October, which won't be very long, now.

As you know, we are getting all set for the Centennial Anniversary, next year, so the 1948 session will be in the nature of a rehearsal for the biggest event in our history.

We would again remind you that reservations are well in order, for we look for a record-breaking attendance, this year. Better get your letter in the mails, right now, thus being assured of the type of accommodations you wish for the session.

One of the finest things Dr. George F. Lull, secretary and general manager of the American Medical Association, is doing—and he is doing a lot of fine things—is his weekly "Secretaries Letter," a breezy comment on what is going on in medical circles all over the country. It is about as readable as anything that comes to our desk and we thoroughly appreciate his efforts to tell the membership what he is doing and what the other fellow is doing.

For a good many years criticism was made, much of it of a justifiable nature, that the "little fellow," the lowly A.M.A. member, knew very little about what was going on at headquarters and elsewhere. Now we know what is doing in medical circles, and again express our deepest appreciation of the efforts of George Lull to keep us posted.

In the passing of Dr. Maurice R. Lohman, of Fort Wayne, the medical profession of Indiana has lost one of its best friends. For thirty-three years he had practiced his chosen profession, yet found time to attend to many of what he termed his "civic duties."

We first met the man at a state association convention, many years ago—at French Lick, as we now recall—and through many years had a very great admiration for his many talents.

We have served with him on various committees, always having had occasion to admire his ability to know the right thing to do, plus the right moment to do that thing.

Maurice Lohman will be sorely missed in the Councils of the Indiana State Medical Association, as well as in his home society.

We have not said much about a 1948 vacation, so far this year, chiefly due to the fact that up to the present writing weather conditions have been such that vacation thoughts are not very numerous. In more than seven decades' residence in Indiana we never have experienced such "weather." The winter was long, cold and damp, and we just did not have any spring.

The poor gardener, whether of the professional or the back-yard type, has had little to comfort him.

However, we have been watching the tomato crop reports and these are not too discouraging. At present it appears that Indiana will come through, as usual, with a large crop and that she will maintain her reputation as the chief tomato state in the nation.

Despite the fact that the sale or use of fireworks is "against the law" in Indiana, as well as in most states, press reports indicate that there is considerable traffic in these instruments of danger. Several concerns are advertising a mail order business, chiefly using the "comics" as their means of exploitation.

Youngsters are urged to spend a dollar or two for a mail order shipment and on many occasions the law-enforcing agencies have had to confiscate these shipments.

Incidentally, in speaking of these "comics," we are mightily pleased to note that the sale of these publications is being banned in many cities—not all of them, by any means—but in some communities as many as thirty of them have been placed on the proscribed list.

We get a lot of pleasure from the interest our youngsters show in the "funnies" of our papers, especially the Sunday editions, but we believe there is little use for the average "comic book."

The Lake County Medical Society observed its fiftieth birthday on June 10, with a dinner party at the Hotel Gary. Unusual for such parties is the fact that there was no oratory and no fireworks—the meeting was but a celebration, minus all those things that usually go with birthday parties. It was purely a social affair, much to the pleasure of many of the older members. Dress was of the "informal variety," also pleasing to the old-timers, who knew naught of getting all dressed up to go to a party.

It has been proposed that the new Northern Indiana Hospital for Children, now being erected at South Bend, be named the "Walter H. Baker Hospital for Children," honoring a South Bend surgeon whose efforts in behalf of maimed and crippled children have been untiring, over a long period of years. We often have wondered why it should be that such recognition often is given to some person after he has died, rather than to accord him this bit of praise while living.

The following news item from *The Indianapolis Star* will be of interest to our readers:

"**Delphi Citizen:** Dr. C. C. Crampton of Delphi always has a way of doing just the right thing at the right time. We could cite many examples but here is one that is both right and original, or so we believe.

"Every year Dr. Crampton looks over the list of graduates in the local high school and then gets out his register and turns the page back to 17 or 18 years ago and picks out 'his babies.' To each he sends a prescription blank on which is written date and hour of birth and under the R/x are these words: '$1.00 to spend as you please.' This year five of his 'babies' received the gift."

Each day we seem to be adding to our vocabularies; now we have a couple of new terms—"flash storms—flash floods." We have known of a lot of windstorms in our day, as well as many periods of high water, but it would seem that spring, 1948, is doing an unusual job of it.

The other evening we were sitting on our back porch, enjoying one of the really comfortable evenings of the year, when there was a sudden gust of wind, breaking of small branches from the trees, causing our little birds frantically to seek some shelter.

It was all over in less than one minute but, sure enough, the paper next morning told of a young tornado down state, with a cloudburst in the central area. We do not recall when we have had so many such experiences as this year.

President's Page

VOLUNTARY HEALTH AGENCIES

SINCE the beginning of this century the voluntary health movement has had its fullest flowering in the United States. A recent study, inaugurated by the National Health Council, reveals that they have grown from a mere handful to over 20,000 during this period. Nowhere else in the world has this type of service developed to such an extent or in such variety. Some of these agencies are national, while others are purely local in the scope of their activities. Scarcely any disease of the body or section of the country has been neglected, although their main activities are in congested areas. These agencies are highly specialized expressions of the human impulse to relieve suffering and afford an opportunity for the community expression of neighborliness.

It is difficult to estimate the contributions that these voluntary health agencies have made to improvement in the health of our people, or to evaluate the influence they have been in creating the expansion of the activities of health services supported by taxation. Undoubtedly, they have contributed much. In general their activities have been beneficial. It has been the established policy of the state medical association and its members to cooperate with the agencies and wisely direct their activities, if they were in the interest of improvements in health.

However, as various private and tax-supported health facilities have been increased, the need for many of these voluntary agents has diminished, yet more such organizations are being formed each year and few of them disappear, because of the desire of the executives to maintain their jobs, and because many prominent people desire to retain the project in which they have a sincere interest and pride in its accomplishment. As a result, many of these groups strive to expand their activities into new fields in order that their continuation may be justified.

This has resulted in an overlapping of functions and duplication of effort of voluntary and tax-supported agencies, with considerable waste and extravagance. The public has become confused as to which of the projects are worth-while and the extent to which they should give their financial support. It seems essential that more effort should be expended to correlate the activities of all health agencies, both on the state and local level, so that inequalities and duplication would be lessened.

The A.M.A. and its rural health committees have suggested the creation of local health councils. Already seventy of these have been formed in Indiana. These are composed of physicians, representatives of allied professions and other interested prominent laymen. Physicians should advise these groups wisely, and may be of great service to their community in these projects. The health councils should study the health needs of the community, act as leaders in formulating plans to meet their needs and strive to eliminate wasteful duplication of health activities.

The health council might unite the fund-raising activities of these voluntary health agencies in each community, much as the Community Fund has correlated the activities of many social agencies, and set up a joint fund-raising program. Many of these voluntary groups may object to such an arrangement, and it may have its disadvantages. On the other hand, the public is entitled to a better evaluation of its health needs and of the individual responsibilities of citizens to the many requests for contributions now being made. There are now many agencies overburdened with funds while others have insufficient funds to operate properly. It is my judgment that this is a project that needs careful exploration and that physicians should stimulate this activity by the health councils, or some similar local group.

Cleon A. Nafe

THE PROGRAM OF THE AMERICAN MEDICAL ASSOCIATION†

R. L. Sensenich, M.D.*

SOUTH BEND

EACH human being is a living and functioning individual personality and is far more complex than any social system.

Government regulations of necessity are based upon averages; the depressing dead level of mediocrity spreads like a cloud over all the normally stimulating interests and personal strivings of the individual.

Government is a clumsy process as will be borne out by those conscientious agents who from time to time try to administer regulations in a way responsive to the most unhappy individual variations.

These statements are not original with me. They are based upon the philosophy and experience of the ages.

But a certain amount of governmental assistance is necessary and social systems provide an organized pattern for community activities.

The best social system offers opportunity to each individual to provide for himself and extends aid only in those areas in which he is unable to safeguard himself or to provide for his needs. In these cases his friends and neighbors are best able to determine his needs and administer government help in the most intelligent response to that need. Instead of promoting government controls and destroying local efforts, good government encourages wholesome interweaving of local interests and activities to the maximum degree in meeting local problems without government participation.

Government is not an all wise unit of power, but is made up of individuals holding office either by public election or appointment. Specific activities in the various divisions of government are in the final analysis the direction of government power by some individual agent according to law or bureaucratic regulation. The agent may be wise or incompetent, and his direction may be wise or harsh or stupid despite the best efforts in legislative enactment.

Governmental administration adds to the cost of the particular service and taxes, direct or indirect, fall upon the small earner as well as the wealthy one. All security measures are taxes, not insurance. Percentage assessments are made and funds collected from employers and employees who cannot possibly participate in benefits from the plan. The National Health Program of the American Medical Association encompasses the broadest possible approach to the highest levels of health, mental and physical, disease prevention, medical treatment as needed, prolongation of life, and finally for support of research for advancement of medical science.

This is a much broader field than that covered by the discussion of insurance plans. You have had a broad, informative discussion of the basis structure of insurance plans. Nothing would be added by reviewing the various types of plans advanced by state and county medical associations under provision of state laws. These plans have made a tremendous contribution to the development of voluntary plans. They have explored new areas of risk, developed valuable information on the basis of risk experience, have broadened coverage and have extended this type of insurance to many diversified groups not previously included in the larger group policies. Mutual and commercial companies have been stimulated to provide additional lines of contracts and broaden their coverage. The Blue Cross Hospital plans of the American Hospital Association have been outstanding in their demonstration of stability and dependability. The number of individuals covered by these voluntary plans takes from the proponents of government compulsory insurance any vestige of argument that the public will not take voluntary measures to protect themselves against possible needs.

The argument is often advanced that those who need insurance most will not voluntarily purchase it. Some may not, but most do participate. The question may be asked as to why compel all to employ cumbersome, political, bureaucratic machinery and destroy the quality of medical care in order to compel the contribution of the few who may be negligent. The negligent one must be cared for from tax funds when sick. It would probably be less expensive to provide medical care from general tax funds to which everyone makes payment than it would be to support the political governmental machinery necessary to collect and disperse this special tax upon covered employment for the purpose of providing political medicine.

It has been argued by those who propose compulsory sickness insurance that giving aid under voluntary plans to those in need requires a "means test" to which they have great objection. They state that under government compulsory tax the individual would receive this care as a "matter of right." Do only the indigent have rights? For example, old-age pensions under Social Security are

† Presented at the National Health Assembly, Washington, D.C., May 2, 1948.

*President-Elect, American Medical Association

in great measure supported on funds derived from compulsory payments by employees who can never receive benefits from the plan. The young woman who is employed for slightly less than the ten years necessary to secure permanent insurance status who then marries, has children, could use to good advantage that fund presumably held for her support in her old age. What becomes of her rights to that sizeable proportion of the total required contribution to her pension at age sixty-five? What about the rights of others who are forced to pay into a fund from which it would be impossible for them to obtain benefits? Why is the determination of need such an offensive matter? The government requires varying percentage payments from those in covered employment, although the benefits do not vary accordingly. An outstanding example is that of the individual who has made the required percentage payments to old-age insurance for many years. He arrives at the retirement age of sixty-five but is denied old-age insurance benefits because he earns more than fifty cents a day.

The National Health Program of the American Medical Association is a broad program recognizing the importance of the individual and his best interests.

The 10-point health program of the American Medical Association assures the constant improvement in the health of the American people.

In the same spirit that the individual physician traditionally has placed the welfare of the patient before all other considerations, the medical profession places the welfare of the American public first.

With the voluntary cooperation and support of the American people, the medical profession can and will bring constant improvement in medical service and health opportunities to all.

The 10-point health program of the American Medical Association promotes the following:

1. Nutrition, housing, clothing and recreation; 2. Preventive medicine, health departments; 3. Prenatal care, childbirth; 4. Infant welfare, child care; 5. Hospitals, health and diagnostic centers; 6. Voluntary prepayment plans for hospital and medical care. 7. Veterans needs for hospital and medical care; 8. Research for advancement of medical science; 9. Volunteer health agencies, philanthropic funds; and 10. Health education in prevention of disease.

WHAT THE AMERICAN MEDICAL ASSOCIATION IS DOING ABOUT RURAL MEDICINE*

F. S. Crockett, M.D.†

LAFAYETTE

THE medical profession, as represented by the American Medical Association, has been fully aware, over the years, of the health problems of our people. The rural problem, as distinguished from the urban, is more concerned with the distribution of professional personnel and the availability of hospital and diagnostic facilities.

The country towns and villages with good homes, roads, schools and churches, are nearly all supplied with doctors. Then there is the marginal type of farm country, where meager economic reward creates communities with inferior housing, poor schools and churches, and with cultural conditions and ambitions in keeping with their poverty.

American agriculture has enjoyed great prosperity in recent years. Many sections, formerly in economic distress, are now quite able to provide for themselves. But our improved financial status has not always meant better health and living conditions. This can be had by health education attuned to the special health needs of each community, be it prosperous or in need. Health improvement can come nearer to a satisfactory solution when it is done by voluntary action voluntarily agreed to.

Medical practice has experienced a profound transformation in the past few decades. Some of us here may have personal experiences and memories of these changing years. Medical science of today has developed many therapeutic agents and techniques of recognized benefits. Their total contribution to human health and happiness is beyond computation. Preventive medicine and the growing knowledge of the rules for healthful living are being observed by an ever-increasing number of our population. The ideal of the medical profession has always been that all these benefits should be available to all people, according to their need. I am sure there is no difference of opinion here. The medical profession wants this ideal also realized in rural America. We are doing more than just talking about it. We have a plan which in three years has produced results, not only on the national and state level but, through trial and error procedure, on the county or trade area level in several states. It has developed an atmosphere of confidence and a large measure of agreement between organized

* Presented at the Vanderburgh County Postgraduate program, in Evansville, on May 27, 1948.

† Chairman, Committee on Rural Medical Service, American Medical Association.

medicine and organized rural America. It has developed as a voluntary civilian movement to meet and solve a civilian need.

Three years ago the American Medical Association appointed a Committee on Rural Medical Service to study the problem of rural health and, in cooperation with rural people, to seek practical solutions in harmony with rural practices. The problem being nation-wide, the country was divided into eight groups of states where comparable rural health conditions would stimulate a common interest in their solution. A member of this committee resides in each area. He is responsible for his area in promoting and coordinating rural health activity, and his knowledge of his regional conditions contributes much in deliberations of the committee.

We have been very fortunate in having advisory members from the American Farm Bureau Federation, the National Grange, the Farmers Union, and the National Cooperative Milk Producers Federation, who join in all of our deliberations. Forty-five of our state medical societies have appointed Rural Medical Service Committees to work in conjunction with our national committee. So the idea guiding us to date is that the function of medicine in this plan is to point the way and advise, within the scope of our training and experience, realizing fully that any actual accomplishment must be attained through those leaders who will undertake to create, among their neighbors, the interest in and desire for better living. This briefly outlines our national and state organization. We are an action as well as a study committee.

During the past three years annual national conferences on rural health have been held in cooperation with the four national farm groups mentioned. They have been increasingly successful and some of you have honored us with your attendance and active participation. Rural Medical Service Committees in a number of states have held one and two day conferences, reporting enthusiastic participation by all interested elements. In several states health councils have been formed with the expectation of encouraging like action in the counties.

As a people we are disposed to take good health for granted. It is only after we have experienced the loss of it that we appreciate its value. If we can stimulate an intelligent self-interest in keeping well, equal to the desire to get well, we will have little difficulty in the rapid fruition of our budding ambition for widespread rural health. This surely points to the creation of some plan by which orderly progress can be made. This can be done in all communities through local councils which serve as a clearing house of ideas and inspiration for those who know what they want but need help in doing it.

Last year emphasis was placed on the need for action in the community. In eighteen states progress is being reported in forming county health councils. These councils are the heart of this whole effort. We doctors and farmers are proceeding in the belief that the best way to help people is by helping them to help themselves. The members of the county health council should include both town and country leaders representing all civic, professional, school, church, and agricultural organizations, together with public health and agriculture extension personnel. The extension departments of our state agricultural colleges have done an outstanding piece of work in stimulating interest in health through their home economic programs and through the 4H clubs. The local health councils channel local effort for community improvement. This local effort educates the people, not only in the advantageous objectives to be gained, but also in the technique of procuring it for themselves. Local pride is stimulated by achievement that strengthens the whole democratic process. In giving a council a job to do, the program should not be limited only to some immediately desired objective but should be as broad as local interests demand. It is quite evident that the program should start with a careful survey of local needs and local advantages to prevent duplication or unproductive effort.

The primary program must be provided by those who have given the subject considerable consideration. It must be practical. It must pay off within a reasonably short period. It is questionable if more than one or two major efforts should be put forward during any one period. Secondary objectives should be kept alive by study and discussion for action later. Our idea might be illustrated by enumerating some of the subjects that could be considered by any community together with their special local needs.

1. *Nurse's aid training for farm women for help in emergencies.* During the nurse shortage, this nurse's aid training could be the combined duty of the medical profession, the Red Cross, and the extension department of the agricultural college. People must be prepared to help themselves and their neighbors. This means nurse's aid training for farm women so they can help in emergencies. Several years ago, in New York State, a nurse's aid program was put on and some 50,000 women completed the course given by doctors and nurses with the help of the extension departments of the agricultural college, the home economics clubs, county agents, and others. Another thing they did that was new, at least to me, was that these women established "loan closets" containing the needed accessories required during illness and childbirth, so that anyone could borrow instead of having to buy the things that sometimes add materially to the total cost of medical care.

2. *Provision of facilities needed to attract needed doctors afford greater professional incentive to those in residence.* This includes promotion of

Hill-Burton hospital and diagnostic facilities where the overall state plan has approved them.

3. *Study of utilization of prepaid medical and hospital plans to meet the costs of illness.* Another committee should study the economic aspects of illness. This means not only the loss of productive employment but also the expense accruing from medical and hospital services.

Hospitals must be maintained as well as financed for construction. Any community must expect maintenance to be a yearly charge about equal to half the cost of construction. All of this should be met by services rendered those who need hospitalization. This is not always possible and the deficit must be made up by contributions or taxation. Hospital insurance plans, such as Blue Cross, can provide the hospital with ready pay for services rendered, while at the same time relieving the patient of costs often exceeding the cost of medical care. And if the patient has prepaid medical care, he can also convalesce free from the worries of debts otherwise often requiring months to pay.

If we can point the way so that the citizen can pay by small installments for protection against what might otherwise be an unpredictable catastrophic financial burden, we can relieve him of some of his fears for his future.

4. *Promote plans for adult education so that people with curable conditions will seek help earlier.* This will tie in with TB, cancer, and heart programs, which have done much to acquaint all of us with the health aspects of their special problems. The Public Health Service and extension departments of our state agricultural colleges have been very diligent in this regard. Every year's program has one or more periods devoted to health problems. I am sure they have done a great deal in awakening a desire for better health among farm people. If health education can be presented to the people in such a manner as to excite their interest; if people can be made to realize the advantage of seeking help early, while still curable, we will have done something worth-while. It could be a duty for some active committee to promote adult health education. The women have been intensely interested this long time in everything that promises better health for their families. We can trust the women to bring their men-folks into line.

5. *Strengthen public health service and prevent communicable disease through an informed public opinion.*

Another committee of the health council could study the benefits of adequate public health services, which deal not with curative measures but with the prevention of disease. This includes inspection and regulation of food handlers in groceries, dairies, bakeries, and eating places, disposal of waste material, sanitation in schools and public buildings, the management of epidemics and quarantine of those with communicable diseases. There is no end to the benefits Public Health Service can accomplish when supported by an informed public. This would be a part of the health education program pointed directly in this direction.

Among secondary objectives, the council should be alert to the economic, cultural, and spiritual values that influence individual and community health. Housing, clothing, diet, sanitation about the home, pest and insect control, animal diseases affecting humans, soil conservation and soil building practices that preserve food values, all-weather roads to market, farm parity; all these are of equal importance to those mentioned first in the overall program of a community health council. These objectives mean health education, education directed toward specific desirable goals, goals reached through voluntary cooperation of the whole community; an experience infinitely more valuable to any community than being fed by "manna from heaven." The areas economically unable to provide the full measure of their needs should have assistance from the state. In some states federal assistance may be needed. The local effort should precede outside help and should be commensurate with its resources. Strength of character is developed through self-help and we should keep this fact in mind when plans for assistance are discussed. The same pattern of local organization will apply to any community, irrespective of its economic condition.

While there is widespread interest in health matters, there is no evident "ground swell" demand for action emanating from large segments of the population. Such agitation as witnessed to date has been created by those leaders who understand and value the benefits medicine can bestow, and altruistically want those benefits available to everyone. It is conceivable that everyone would be just as eager if they were equally informed. Some plan of adequate health education must precede any great triumph in the field of rural health.

We are also acting in other directions. The medical profession is stimulating interest in the general practice of medicine through postgraduate instruction; in encouraging general practice privileges in hospitals, enabling the family physician to care for 90 per cent of his patients with a minimum dependance on specialists; through devoting the mid-winter session of the American Medical Association scientific program to general practice problems. The American Medical Association is devoting much money and effort to activities that benefit rural people equally with those in the cities. I refer to the standardization of food and drugs; to the improvement of medical schools and hospitals for undergraduate and postgraduate education and clinical experience, and to the best and most authoritative medical journals. In a number of states the profession has established loan funds for farm boys and girls who wish to study medicine. Medi-

cal schools have been encouraged to place greater emphasis on general practice during the student years.

We physicians agree with the farm leaders that the principal factors that influence the location of recent graduates are economic, cultural, and the opportunity to practice medicine as they have been taught. Communities qualifying in this regard have ample professional personnel. Our problem is to encourage other communities to afford equally desirable opportunities.

In summary, I may repeat that the concern of the medical profession in the rural health problem has been expressed by the appointment of a national Committee on Rural Medical Service which has developed a plan and created the machinery in the states to implement it. Cooperation with the major farm groups has been developed in an atmosphere of mutual friendship and trust. The plan is based upon an informed citizenry voluntarily engaged in promoting better health and community values for itself.

WHAT EVERY MEDICAL OFFICER SHOULD KNOW ABOUT THE ATOMIC BOMB[1]

IV. Evaluation of the Five Atomic Explosions

Employment of the bomb. The atomic bomb is primarily a strategic weapon, and the choice of target and method of employment require the evaluation of a number of factors. Thus far, five atomic bombs have been detonated, three of them under test conditions. The one factor that makes an atomic bomb detonation different from the detonation of any other type of weapon is the nuclear radiation produced. All high-explosive weapons produce high temperature and high blast pressure, and the only difference in these respects between atomic and conventional weapons is the increased magnitude of the blast and thermal effect produced by the atomic bomb. However, no other weapon devised to date is capable of releasing nuclear radiation.

The first bomb was set off under experimental conditions from a tower near Alamogordo, New Mexico, on 16 July 1945. The second bomb was dropped, 6 August 1945, on the city of Hiroshima from a B-29 bomber. Over 4 square miles of the city were instantly and completely devastated; 66,000 people were dead or missing and 69,000 were injured. On 9 August another B-29 dropped an atomic bomb on Nagasaki, totally destroying 1.5 square miles of the city. The number of persons dead and missing in Nagasaki was 39,000, and 25,000 more were injured. The fourth atomic bomb was dropped by a B-29 on target vessels assembled in Bikini lagoon on 1 July 1946, and the fifth was detonated underwater on 25 July 1946. Test animals placed in various locations on the target vessels yielded important data on the bomb effects. This work was under the supervision of the Naval Medical Research Center.

Action of the bomb. When a mass of fissionable material equal to or greater than a critical size is assembled, a violet detonation will occur. The subcritical masses of fissionable material must be brought together rapidly in such a manner that a chain reaction and detonation will occur. The bombardment of each fissionable nucleus by neutrons results in the formation of two fragments known as fission products. All nuclei do not split into the two types of fragment; therefore, many radioactive substances (fission products) are liberated. The sum of the masses of these fission products will not equal the original mass of the split nuclei. The difference between the fission products formed and the original mass represents the mass of the nuclei that has been converted into energy in the form of blast, heat, light, x-rays, gamma rays, and released nuclear particles.

The detonation of the atomic bomb generates a crushing wave of high pressure. The bomb also liberates an enormous quantity of electromagnetic radiations and neutrons. The electromagnetic radiations include infrared, visible light, ultraviolet, x-ray, and gamma radiation. Thereafter, the fission products formed emit gamma rays and beta particles. The unfissioned bomb residue emits alpha particles. Substances bombarded by neutrons released at detonation, which become radioactive by induced radioactivity, may also emit nuclear particles and gamma rays. A large fraction of the gamma rays is emitted in the first flash of the atomic explosion. Neutrons also accompany this reaction. The range of neutrons is negligible at 1,000 yd. because of their absorption in the air. In an underwater burst, greater absorption occurs, resulting in induced radioactivity of the sea water. Of the constituents of sea water, only sodium is of any significance, and even this element is hazardous for only a limited period because of its short half-life (14.8 hours).

At detonation, practically all of the lethal gamma radiation is released, and the remaining small fraction of the total dose is given off by the resultant fission products that rise rapidly in the

[1] The fourth and fifth of a series prepared by the Special Projects Division, Office of The Surgeon General. Reprinted from *The Bulletin of the U. S. Army Medical Department*, by permission of The Surgeon General, Department of the Army.

bomb cloud. The column of radiating fission products and combustion material rapidly rises into the air and begins to mushroom out when the temperature of the column is equal to the temperature of the surrounding atmosphere. The climatic and meteorologic conditions will govern the diffusion, dispersion, and radiation activity of the cloud. The fissioned and unfissioned material in an airburst will be distributed in the atmosphere; while in a subsurface waterburst, the adjacent water, ships, and land facilities in proximity to the detonation will be seriously contaminated. Fission products in the cloud may be dispersed as fine particles of varying size, and, depending on many factors, a shower of the radioactive material will fall on nearby areas. The fission products, therefore, present a continuing health hazard for a considerable time as an aftermath of the explosion. In general, regardless of the technique of bomb detonation, radioactive materials emitting alpha and beta particles and gamma rays will be encountered. The radioactivity of these substances will range from a few seconds to years. Violent changes in temperature, strong magnetic or electric fields, and drastic chemical interactions have no effect on the rate of transformation or emission characteristics of the radioactive substance. If an element is radioactive, it will decay normally according to its inherent half-life.

In the underwater detonation of the bomb, thousands of tons of water rise in a column, a few thousand feet in the air, followed immediately by a rapidly moving mass of water, constituting the base surge. The turbulent waters contain a high percentage of the fission products and unfissioned residue. Immediately at detonation and for a short period thereafter an enormous amount of radiation is emitted. The falling column of water and mist, depending on wind conditions and depth of detonation, contains a high percentage of the fission products and unfissioned residue that can contaminate an area of several square miles for a considerable period.

The emission of infrared, visible, and ultraviolet light occurs a few milliseconds after the explosion. The ball of fire in the airburst grows rapidly in size. As it grows, its temperature and brightness decrease. Several milliseconds after the initiation of the explosion, the brightness of the ball of fire is several times the brightness of the sun. Most of the infrared and ultraviolet radiation is given off after the point of maximum intensity. The ball of fire rapidly expands from the size of the bomb to a radius of several hundred feet at one second after the explosion. Thus, the infrared and ultraviolet radiation comes in two bursts—an extremely intense one lasting a fraction of a millisecond and a less intense one of much longer duration lasting several seconds.

The heat from the flash in an airburst occurs in a short time, and, since there is no time for any cooling to take place, the temperature of a person's skin can be raised 50° C. by the flash of infrared and ultraviolet rays in the first millisecond at a distance of over 4,000 yards. People may be injured by flash burns at even greater distances. Gamma radiation danger does not extend nearly so far, and the neutron danger zone is still more limited. High skin temperatures result from the first flash of high intensity infrared and ultraviolet and are probably as significant for injuries as the total doses that come mainly from the second, more sustained, ball of fire.

Effectiveness against personnel. For personnel in the open, within one-half mile of zeropoint of the airburst detonation, death would occur almost instantaneously or within a few hours from the blast, heat and radiation effects. Within a radius of one-half mile and one mile from zeropoint, some persons would die instantly, while a majority would receive varying degrees of injury. Ordinary houses and structures would suffer complete destruction or extensive damage and fires would be widespread. Outside a radius of one mile and within a radius of two miles from zeropoint, personnel would suffer injuries from flash burns and indirect blast effects. Outside a radius of two miles and within a radius of four miles, personnel would be injured by flying fragments and suffer superficial wounds. Structures would be half or partially destroyed within this radius. In an airburst explosion 70 per cent of those exposed would suffer from trauma, 65 per cent from burns, and over 35 per cent from radiation.

The radiologic hazard. In general, any radioactivity that remains in the area as fission products or induced radioisotopes will constitute a hazard. Fission products from the airburst bomb may be dispersed in the ground or spread out over wide and diffuse areas, depending on the technique employed in the detonation. Consequently, the degree and extent of residual radioactivity would depend on the height of detonation, climatic and meteorologic conditions conducive to the showering of the products on a specific area, and the nature and composition of the terrain. For example, because of the height of the detonation, certain prescribed areas of the bomb crater might remain hazardous. Also, because of the composition of the ground, dust particles intermixed with fission products might rise in the cloud. Many of these "dust particles" might also become radioactive as a result of neutron bombardment released at detonation and thus contribute to the hazard.

When the bomb is detonated over a modern city that contains countless thousands of items composed of iron, zinc, copper, and other "neutron capture materials," it is possible that many of the elements within the effective neutron range may become radioactive for a considerable period. The half-lives of some of these common elements and the radiations emitted are listed in table I. Therefore, objects or material that might survive the detonation, such as medical supplies containing

TABLE I

Partial list of some common radioisotopes that may be produced by neutrons released at detonation.

Radioisotope	Half-life	Radiation
Sodium-24	14.8 hours	Beta, gamma.
Sulfur-35	87.1 days	Beta.
Calcium-45	180 days	Beta, gamma.
Iron-59	47 days	Beta, gamma.
Cobalt-60	5.3 years	Beta, gamma.
Copper-64	12.8 hours	Beta.
Arsenic-74	16 days	Beta, gamma.
Gold-199	3.3 days	Beta, gamma.

sulfur or arsenic, should be handled with caution until the degree and extent of the induced radioactivity is determined. In some cases, it is possible that fission products also are present and are adhering to the material. In an underwater burst the main hazard, following detonation, will be the result of the deposition of a large per cent of the fission products in the water and on nearby objects. In addition, radioactive sodium is formed by the action of neutrons on the sea water. Some of the more persistent and hazardous fission producers of U-235 are listed in table II.

TABLE II

*Partial list of fission products of U-235**

Fission product	Half-life	Radiation
Strontium-89	53 days	Beta.
Strontium-90	25 years	Beta.
Yttrium-91	57 days	Beta.
Zirconium-95	65 days	Beta, gamma.
Columbium-95	35 days	Beta, gamma.
Ruthenium-103	42 days	Beta, gamma.
Ruthenium-106	1 year	Beta.
Cadmium-115	44 days	Beta, gamma.
Cesium-137	33 years	Beta, gamma.
Barium-140	12.8 days	Beta, gamma.
Cerium-141	28 days	Beta, gamma.
Cerium-144	275 days	Beta.
Neodymium-147	11 days	Beta, gamma.
Europium-155	2 years	Beta, gamma.

The radiologic hazard can be divided into two phases. The first phase includes the immediate or prompt release of any ionizing particles or radiations caused by the explosion during the period of visible flash of the bomb. These prompt ionizing radiations include beta particles, neutrons, x-rays, gamma and alpha particles from unfissioned bomb residue, and the ionizing radiations from fission products. After the flash of the bomb has subsided, a matter of a few seconds, the delayed phase of the radiologic hazard is of importance. The hazard here is from fissioned and unfissioned material and from radioactive elements induced by neutrons from the explosion. The nature and persistency of the second phase depends on the technique of detonation. In addition to the phase of the radiologic hazard, the protection problem depends on whether the radiation concerned is external or internal to the body. Alpha particles, for example, present no external hazard; but if they are inhaled and become fixed in the bone, depending on the amount, the results may be lethal. Although very little can be done to protect personnel in the open within the lethal range at the instant of detonation, a few points in connection with the second phase may be useful. A comparison of radiations is given in table III.

* Nuclei Formed in Fission: Decay Characteristics, Fission Yields, and Chain Relationships, survey prepared by J. M. Siegel et al., J. Am. Chem. Soc., 68:2411-2442, Nov. 1946.

TABLE III

Comparison of radiations

Nature	Description	Range		Ionizing power*
		Air	Tissue	
		Ft.	*Cm.*	
Alpha	Helium nucleus (2 protons and 2 neutrons)	0.1	0.01	10,000
Beta	Electron emitted from nucleus	10	1.0	100
Gamma	Electromagnetic radiation from nucleus	1,000	10.0	1

* NOTE: For each ion pair formed by a gamma ray, 10,000 ion pairs are formed by an alpha particle.

The relative protection against gamma radiation by shielding, in order of effectiveness, is given by lead, iron, concrete, earth, water, and air. Using the gamma radiation from radium as an illustration, a 5 in. thickness of concrete gives about the same protection as a 1 in. layer of lead. Where no shielding is available, "distance" is the best means of protection. It should be noted that neutrons pass through lead with extreme ease, but are readily absorbed by hydrogenous materials and boron.

The flash burn. At detonation, the flash burns from infrared and ultrared caused a higher per cent of casualties than the radiologic effect, because of the increased range of the flash. Light shades of loosely fitting clothing, antiflash cream, and protection of the entire body surface will reduce the per cent of casualties. Protection by these means will not reduce the effects of burns produced by secondary fires in buildings or facilities. The problem here is to minimize the amount of inflammable material as far as practicable. In this connection, materials that ignite easily should be avoided in the design of equipment intended for military operations. Flash burn is not a serious factor in an underwater detonation.

SUMMARY

Air-burst atomic bombs will produce lethal effects over an area of two square miles and measur-

able effect over an area of seven square miles as a result of the prompt gamma radiation emitted at the time of detonation. The residual radioactivity is of little importance except in the area close to the center of a low-altitude explosion. In an underwater detonation, radioactive fission products and unfissioned material will be spread by the cloud and base surge over a large area. The gamma radiation from these materials will be lethal to exposed personnel more than two miles downwind, and serious contamination will result at much greater distances. This contamination will provide a serious hazard for an indefinite period. Prompt evasive action at the time of the detonation will permit the reduction of casualties, and orderly evacuation and re-entry procedures will undoubtedly pay great dividends in minimizing the effects.

V. Fundamentals of Radiation Pathology

The pathologic effects of radiation can best be presented by outlining the early and late changes in (1) tissue cells, (2) organ systems, (3) total body irradiation, and (4) internal radiation by radioactive materials introduced into the body either accidentally or therapeutically. Sensitivity of the various body tissues has been well established, and has been expressed largely as the relation of one tissue to another. Table I shows the relative sensitivities as indicated in two studies.

Table I

Relative radiosensitivities of various body tissues listed in decreasing order

Desjardins*	Warren**
Lymphocytes	Lymphocytes (and germ cells).
Granulocytes	Granulocytes.
Epithelial cells	Epithelium.
(a) Basal cells of secretory glands	Smooth muscle.
(b) Basal cells of testes and ovarian follicles	Fibroblasts and derivatives.
(c) Basal cells of skin and gastrointestinal tract	Neurons.
(d) Alveolar cells of lungs; bile ducts	
(e) Tubules of kidneys	
Endothelial cells	
Connective tissue	
Muscle cells	
Bone cells	
Nerve cells	

Reactivity of the tissues in terms of energy or actual ionizing effect from a quantitative standpoint is somewhat less definite. Variation in response to ionizing radiation has been indicated in numerous studies, but becomes of particular interest in total body radiation, since in this circumstance the variation is not only a question of death or survival over a relatively broad range of radiation dosage, but also manifests itself as well by variations in organ responses, presumably by an equally wide range in symptoms and clinical findings. The effects of ionizing radiation are considered at present to be similar for all types of radiation—alpha, beta, gamma, x-ray, and neutron sources—when equal amounts from the standpoint of energy and time relationship are absorbed in the tissues.

Tissue cells. There is no satisfactory indication of any tissue effect of radiation other than destruction. In prolonged exposures of animals to tolerance and slightly higher levels, survival rates were higher in the exposed groups than in the controls. This same tendency was noted in weight curves. The exposed animals showed weights consistently above those of the controls, mostly from abdominal fat. This was considered not to be a castration effect. From a morphologic standpoint, however, the purely destructive effect has been emphasized in a recent report by Bloom.[2] It is well to keep in mind that it is unlikely that all tissue has been subjected to the ionizing action of radiation. Microscopically, any one or all of a number of cellular changes may be observed, such as: (1) changes in staining characteristics, usually an increase in eosinophilic properties; (2) increased granularity, usually of cytoplasm; (3) vacuolation of a variable degree; (4) swelling of cellular components; (5) distortion of cellular structures; (6) cytolysis (loss of definitive borders); (7) pyknosis; (8) changes in Golgi's apparatus; (9) reduction in mitotic activity; (10) production of abnormal mitoses; (11) chromosomal changes (fragmentation clumping); and (12) increased refractile neutral red staining bodies within leukocytes seen by vital staining methods. These changes are found in conditions other than radiation, and although highly suggestive are not specific. Alterations in the noncellular tissue may include intercellular edema, swelling and hyalinization of colloid, and swelling and fragmentation of elastic tissue. A more direct approach to the cellular changes is found in observations on cellular viscosity, ciliary action, phagocytosis, cellular secretions, and a few enzyme systems that can be demonstrated. Alterations in these processes have been described following radiation.

Initially no changes may be found. Alterations in viscosity and slightly increased acidophilic staining properties are among the earliest findings. Cessation of mitoses and destruction of lymphocytes may occur in a matter of hours or less. Vascular dilatation and edema may follow, and, in the case of larger doses, actual necrosis of tissue cells may occur, again depending on the relative sensitivity. These represent only the readily demonstrable

* Desjardins, A. U.: The Radiosensitiveness of Cells and Tissues and Some Medical Implications, Arch. Surg., 25:926-942, Nov. 1932.

** Warren, S.: Histopathology of Radiation Lesions, Physiol. Rev., 24:225-238, Apr. 1944.

[2] Bloom, W.: Histological Changes Following Radiation Exposure, Radiology, 49:344-348, Sept. 1947.

changes, and are certainly an inadequate and relatively crude index of the tissue alterations.

In small or moderate doses recovery may occur with no residual lesion, may show the frequent pattern of repair by fibrous tissue replacement, or, in other instances, may show the pattern of repair characteristic of the organ. There is no indication that the features of repair are specific or characteristic for any or all types of radiation. References to "radiation fibroblasts" and "radiation dermatitis" lead one to assume that these are peculiar to radiation injury, although such is not the case; but these designations are useful in evaluating tissue damage and probable etiology. The recovery stage in terms of tissue repair is often a matter of months or years and, in the case of repeated or continuing exposure, becomes a much more important problem.

The late effects, in most instances involving repeated exposure to radiation, are well established and include: (1) atrophy and ulceration of the skin, telangiectasia, fibrosis, and vascular occlusion, which were early recognized as radiation effects; (2) carcinoma of the lung, which in the Schneeberg mines was considered to be due to the radioactive material present in the inspired air; (3) bone sarcoma developing in persons ingesting radium; (4) carcinoma of the skin as a late effect of repeated exposure to x-rays; (5) leukemia, which has an increased incidence in those exposed to repeated radiation; and (6) other effects, such as genetic variation and shortening of the life span.

Lymphoid tissue. Changes in the lymph nodes have been described by many investigators. Relatively small doses produce in a short time nuclear degeneration of lymphocytes and some distortion of the germinal centers. Congestion, swelling, and slight inflammatory cellular infiltration may occur. Mitoses are not seen until regeneration becomes active. Continued cellular degeneration is followed by increasing and active phagocytosis by large macrophages. Erythrophagocytosis occurs in addition to the phagocytosis of nuclear and cellular fragments. The inclusion of red blood cells in the macrophages is an early finding, the significance of which is not well understood. Repair following small doses is rapid and apparently complete. Somewhat greater doses result in a marked reduction in lymphocytes, leaving an almost empty reticular stroma with the persistence of a few small lymphocytes and a few larger reticulum-type cells associated with the germinal centers. Repair may take place, if the destruction has not been too great, apparently from the remnants of such centers, often with definite irregularity in the size, shape, and pattern of the lymph node. If the damage has resulted in almost complete destruction, the area may consist of more or less condensed stroma and loose connective tissue containing a few scattered lymphocytes. Such areas are said to offer no resistance to lymphoid circulation.

The spleen is less sensitive than the lymph nodes and regenerates less completely. A similar cycle of changes occurs. Loss of the lymphocytes may result in condensation of the stroma, and an accentuation of the reticular and sinusoidal pattern occurs. Regeneration, if it takes place, may show considerable irregularity in the cellular forms. Phagocytosis is active, and quantities of pigment may be present in the spleen after recovery. As in the lymph nodes, regeneration appears to proceed from the remaining recticulo-endothelial elements. The heavy accumulations of pigment have been interpreted as evidence of excessive blood destruction, or failure of splenic tissue to dispose of the material, or both. The thymus shows changes of a similar nature, although phagocytosis and disposition of pigment are not seen as in lymph nodes and spleen.

Bone marrow is more resistant to radiation than lymphoid tissue. Destruction of cells appears to involve both the immature granulocytic and erythrogenic forms. Regenerative changes are seen early, within the first week. Pigment deposits, eosinophils, and plasma cells may appear. With particularly heavy irradiation, almost complete loss of cellular elements may occur, with only a few reticulum cells and perhaps an occasional focus of erythropoietic cells. The marrow in such cases possesses a peculiar gelatinous appearance, grossly, with a deceptive red coloration arising from red blood cells within dilated vessels or dispersed extravascularly. Such marrow may regenerate adequately, or may result in an aplastic marrow with variable amounts of connective tissue. In the case of ingested radioactive material, any stage of hyperplasia or aplasia may be found, depending on intensity and distribution.

The peripheral blood picture does not indicate in adequate fashion the processes occurring in the marrow. For example, the apparent parodox occurs in which a hyperplastic marrow is present with a relatively low count in the peripheral blood, which is found in conditions other than radiation effect. In these cases there is usually some lack of maturation within the marrow. This introduces the question that has been asked a number of times in the literature: What factors determine whether a given hematopoietic system, when subjected to repeated demands, stimulation, or insults, will respond by hyperplasia or aplasia? Warren[3] cites the histories of two chemists working with radioactive substances over a period of years in the same laboratory. They observed no protective measures and died within five days of each other —one of aplastic anemia, the other of myelogenous leukemia. One can observe such cases clinically and encounter stages at which one is unable to indicate whether the case will progress to leukemia or to an aplastic anemia. Again this is not a situation peculiar to patients exposed to irradia-

[3] Warren, F.: Effects of Radiation on Normal Tissues, Arch. Path., 34:443, Aug.; 562, Sept.; 749, Oct.; 917, Nov.; 1070, Dec. 1942; and 35:121, Jan.; 304, Feb. 1943.

tion. Several well-known characteristics of radiation are shown by the marrow. One is the destructive effect on tissues elsewhere in the body, when exposure is limited to a relatively small area. Another is the cumulative action of radiation. In successive exposures, the radiation necessary to show definite effects becomes less, and the periods necessary for recovery become longer. This has been expressed in the term "percentage recovery" for certain exposure.

Gonads. The reaction of the cellular elements of the seminiferous tubules to radiation varies. There is evidence to indicate that the primary spermatocytes are the more sensitive, contrary to the general statement that more primitive cells are more sensitive. Next in order of disappearance are the spermatogonia, small spermatocytes, spermatids, and spermatozoa, with the Sertoli's cells remaining and proliferating to replace the germinal epithelium. In other instances the spermatogonia, the most immature germinal cells, have been observed to be the only ones persisting. The interstitial cells have been generally regarded as resistant to radiation. The ovaries are less sensitive than the testes. Maturing follicles have been described as the most sensitive portion, and corpora lutea as relatively resistant. In mice, development of ovarian tumors following irradiation in the tolerance levels has been described.

Gastrointestinal tract. Edema and degenerative changes in the epithelial cells occur early. Subsequent changes may include hyperemia, hemorrhage, cellular changes progressing to necrosis, often with a thick superficial fibrin membrane, and subsequent ulceration. Mitotic figures and atypical cellular forms are seen within a week and are considered to be regenerative in nature, although closely resembling degenerated cells. These early epithelial changes in the gastrointestinal tract have been linked with the profound toxic changes. Connective tissue areas of the walls of the gastrointestinal tract show edema and myxomatous and hyaline changes, the same areas often containing bizarre connective tissue cellular forms. Later effects include fibrosis, atrophic changes in the mucosa such as reduction in the number of glands, and in the gastric mucosa a reduced number of chief cells. Ulceration is a relatively frequent occurrence after an extended period.

Respiratory organs. Pulmonary tissue is considered moderately sensitive to irradiation. A transient pneumonitis occurs, without apparent late effect. No significant changes have been described in the bronchial system.

Skin. The essential features include an early erythema occurring within a few hours to a few days, disappearing within a period of days, followed by a second occurrence of erythema ten days to four weeks later. This second episode represents the culminating pathologic change in the connective tissue and vascular bed of the corium, in contrast to the more direct injury to epithelial cells resulting in the early erythema. Pigmentation, epilation, and ulceration may follow with destruction of dermal glandular structures. Atrophy, hyperkeratosis, and telangiectasia may develop after repeated small doses without the preceding clinical manifestations and with the possibility of malignancy. The histologic picture is characteristic. The epithelium is thin, with obliteration of rete pegs. Irregular acanthosis may be present with cellular abnormalities. The corium shows dilated vascular spaces, atrophic skin appendages, dense and hyalinized collagen with variable basophilia, and reduced or absent elastic tissue.

Other organ systems. The epiphyseal region of infants and children is particularly reactive to radiation. In the eye, radioconjunctivitis occurs with moderate doses and may be followed by keratitis. Lenticular opacity occurs in young eye tissues with moderate doses, as compared with the greatly increased doses necessary in mature lenticular structures. Tissues that have not been discussed are generally in the less reactive range and undergo few changes except in massive localized exposure. To this group belong nerves, heart, liver, pancreas, bone, and muscle.

Total body irradiation. Doses used commonly, such as the erythema dose, approach or exceed the lethal dose when applied to the entire body. It is of considerable interest to define the changes at various levels of total body irradiation, and a certain clinical experience is available, as well as numbers of animal studies. Early and rather striking changes have been described in the gastrointestinal tract of animals dying of total body irradiation, with relatively slight changes elsewhere. Survival for a longer time places the organism in a period in which vascular damage and hemorrhagic phenomena are outstanding. The generalized destruction of hematopoietic tissue is a major factor at this and later stages. The findings at later stages are those of severe infection without adequate cellular response, and presumably without adequate resistance.

Internal radiation by radioactive substances does not involve any differences from the tissue reactions described, other than those associated with localization and intensity. The action of radioactive substances internally depends on (1) the activity of the substance ingested, whether an alpha, beta, or gamma emitter, and the duration of its activity; and (2) behavior in the body—rate of excretion affinities for certain tissue, and its course of localization. For example, radioactive sodium-24, which is highly diffusible in the body, gives the pathologic picture of total body irradiation from an external source. The localization of many of the radioactive materials in relation to bone has intensified their effect. The lesions in radium poisoning may be used as an example—bone necrosis, particularly in the jaw, destruction of marrow with variable hyperplastic and

aplastic changes, and the incidence of malignancy in the form of bone sarcoma. The amount of radioactive isotopes required to produce bone sarcomas, lymphomas, and the like in animals is practically identical with that required to produce perceptible effects in the peripheral blood.

THE AMERICAN ACADEMY OF GENERAL PRACTICE AND THE INDIANA CHAPTER

ARTHUR N. JAY, M.D.

INDIANAPOLIS

THE American Academy of General Practice was founded June 10, 1947, by a group of men who were observing the premise that the General Practitioner is the "fire, water, earth and air," the basis of our medical system. They felt that our medical system is the finest in the world but felt that it could not be maintained nor advanced without a definite, organized effort on the part of the General Practitioners. Throughout the nation small, scattered groups of General Practitioners had organized, but they had no voice in affairs on a national or, for that matter, a local level. At the American Medical Association meeting in San Francisco, July 4, 1946, a resolution was introduced from the floor of the General Practice Section requesting the newly-elected chairman to appoint a committee to formulate a national organization for general practitioners. The committee was formed and from that time until June 10, 1947, members worked in contacting every state in the Union, thus obtaining all available information in regard to general practice. At the June, 1947, meeting the constitution and by-laws were adopted and officers elected, with Dr. Paul A. Davis, of Ohio, being named president. Among the Board of Directors we find our own Dr. Lester D. Bibler, of Indiana.

The thesis upon which the Academy was founded was that improving standards and quality in general practice in the country would benefit all of the public and all of the medical profession. Since more than 80 per cent of the medical care furnished in this country today is rendered by general practitioners the thesis is well based.

The objects and purposes of the Academy may be better quoted directly from its constitution and are as follows:

"(1) To promote and maintain high standards of the general practice of medicine and surgery; (2) To encourage and assist young men and women in preparing, qualifying, and establishing themselves in general practice; (3) To preserve the right of the general practitioner to engage in medical and surgical procedures for which he is qualified by training and experience; (4) To assist in providing postgraduate study courses for general practitioners, and to encourage and assist practicing physicians and surgeons in such training; (5) To advance medical science and private and public health."

It is indisputable that the statement of object and purpose here is without doubt a goal that all general practitioners should strive for to the utmost.

General practitioners have perhaps been dilatory in the formation of a group of their own, but with a very definite trend toward overspecialization a healthy counteraction was needed and thus a group was finally formed. Many years ago groups of specialists undertook to establish standards and programs to elevate the quality of the particular specialist practice. They enforced their own standards with no coercion possible by an outside group. General practitioners, through group action and self-improvement, not only can command the respect of the public but gain esteem in the profession.

The response to the formation of the Academy has been enthusiastic. Several thousand have become members, representing every state in the Union, the District of Columbia and Hawaii. In the American Medical Association there are approximately 135,000 members and of these approximately 40,000 are specialists. Thus close to 100,000 are general practitioners and of this group the majority will, it is hoped, eventually become affiliated with the American Academy of General Practice.

In the spring of this year there was a merger of the American College of Physicians and Surgeons with the American Academy of General Practice and after a poll was taken of the complete membership the latter name was found to be acceptable to the largest number. The group was enlarged and more than ever consolidated, so it is apparent that rapid and beneficial strides have been taken in one year.

At the annual convention of the American Medical Association, which opened in Chicago on June 21, a meeting of the Academy Congress of Delegates was held, when the delegates met to revise the constitution and by-laws. This meeting was followed by a banquet at the Sheraton Hotel.

On May 19, 1948, the Indiana chapter of the American Academy was formed at a meeting held at the Indiana School of Medicine. The Indiana Academy of General Practice follows the precepts laid down by the group that worked so untiringly in forming the American Academy. An election was held at this time, following the democratic principles that we all hold in esteem. Officers elected were:

President_____Lester D. Bibler, Indianapolis.
Vice President_____N. H. Gladstone, Fort Wayne.
Secretary Treasurer_____N. R. Booher, Indianapolis.

Directors—Three year term:
Charles J. Folz, Evansville.
Virgil McCarty, Princeton.
David Johns, East Chicago.

Two year term:
Robert Husted, Hammond.
Erwin Blackburn, South Bend.
Louis Firth, South Bend.

One year term:
Harry L. Foreman, Indianapolis.
L. E. Foltz, Brownsburg.
C. H. Rommel, West Lafayette

Delegates to American Academy:
William Tindall, Shelbyville.
O. T. Scamahorn, Pittsboro.

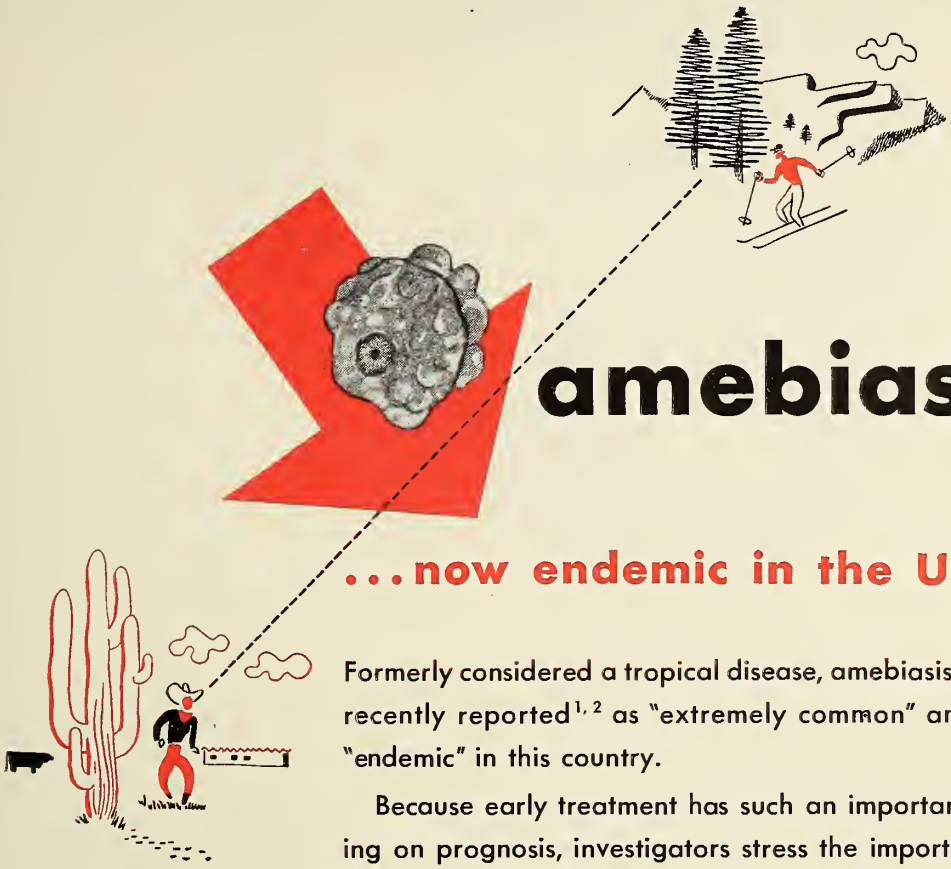
Alternate Delegates:
Clarence Herzer, Evansville.
C. L. Wise, Camden.

Following the afternoon meeting there was a dinner at the Athenaeum. Press comments here, as over the rest of the country, were very favorable. An editorial in *The Indianapolis Star* May 21 was particularly interesting.

All members of the Indiana State Medical Association who are in general practice will receive letters inviting them to join the Indiana Academy of General Practice. Since we have such an organization with the aforementioned objects and purposes it is hoped that all will respond. Indiana numbers itself among twenty-nine states that have state academies even at this early date. Such a group, striving for betterment of general practice and the general practitioner is bound to succeed. A total fee of thirty dollars, comprising ten dollars initiation fee, fifteen dollars annual dues, and five dollars state dues, may be sent with your application to Norman R. Booher, M.D., 447 E. Maple Road, Indianapolis.

Regardless of whether or not you are a member of the Academy of General Practice, you, as a general practitioner are especially invited to a dinner meeting to be held at the Athenaeum on Wednesday night, October 27, during the meeting of the State Medical Asociation. Your wives are cordially invited to come with you to that dinner. The speaker will be Doctor Wingate Johnson, from Winston-Salem, who for many years has been a stalwart general practitioner and is in the councils of the A.M.A. We shall expect to see you at this dinner.

In closing, I should like to quote Editor H. Sheridan Baketel, of *Medical Economics* on the trend toward organization of general practitioners. "If this trend continues our general practitioner may well become the dominant element in the profession. They could have done so long ago had they been better organized. They failed to appreciate their force latent in both their weight in numbers and their ability to make referrals to specialists. It is not a case of G. P. vs. Specialists, or vice versa. It's simply that G.P.'s, like surgeons, have problems that are best solved by an organization of their own."



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1. Chalgren, W. S., and Baker, A. B.: Tropical Diseases: Invalvement af Nervaus System, Arch. Path. 41:66 (Jan.) 1946.
2. Brawne, D. C.; McHardy, G., and Spellberg, M. A.: Statistical Evaluation of Amebiasis, Gastraenteralagy 4:154 (Feb.) 1945.
3. Mansan-Bahr, P.: Same Tropical Diseases in General Practice: "A Past-War Legacy," Glasgaw M. J. 27:123 (May) 1946.

Medical Panorama by the Associate Editor

Residency in General Practice

Rear Admiral Clifford A. Swanson, MC, USN, Surgeon General and Chief of the Bureau of Medicine and Surgery, has announced that a new residency in General Practice was inaugurated in Naval Hospitals on July 1, 1948. The Professional Division of the Bureau of Medicine and Surgery has developed a residency in that phase of medicine which is required to augment the several medical specialties recognized by the American Specialty Boards in order to supplement the residency training program, now operative, which is designed toward specialization. The program, as planned, will cover a period of three years. During each year of this residency medical officers will receive six months of training in general medicine and related specialties, and six months in general surgery and related specialties. Instruction will be provided by the staffs of the hospitals and outstanding civilian visiting staffs. With the introduction of this type of training Navy medicine has recognized the great need of the Geneal Practitioner in the field of Medicine.

———SIMA———

Financial Security

The Association of the Bar of the City of New York has recently made a special study of the federal income tax laws, especially as to inequities which these laws impose on professional men and others whose incomes are attributable to personal services. *New York Medicine* reports on this study, and comments favorably and enthusiastically on a proposal by the Bar Association that a campaign be organized with a view to persuading Congress to correct this injustice.

The present high tax rates make it practically impossible for a professional man to provide a proper amount of financial security for old age and retirement. Under the prewar schedule of tax rates it was possible for a financially successful taxpayer, during his peak earning years, to make provisions for his security during later years when his income would be reduced and when retirement was in order.

The inequity at present lies in the fact that incorporated businesses may establish a pension trust for all their employees, including the owner or owners of the corporation, and may receive tax deductions for all amounts paid into the trust. Federal income taxes are paid on such funds only at the time when they are paid out to the employees as retirement benefits.

One proposal which has been suggested to remedy this situation is to amend the tax laws so as to permit persons with earned income to purchase a limited amount of non-negotiable government bonds, the cost of which would be excluded from his income for tax purposes. Later when the bonds are cashed, the proceeds would become taxable as income in the year in which cashed.

———SIMA———

20,000 Years of Service

The Medical Society of the State of New York has published a handsome commemorative booklet to honor the 432 living physicians of New York State who have practiced their profession for more than fifty years. Short biographical sketches are illustrated by photographs. In the case of 48 of the doctors there is not only a current likeness, but also a photograph taken at the time of entry into practice.

In reviewing the data presented, one is impressed with how many of the practitioners meet the fifty-year requirement with ease. Two of them have practiced for seventy years, and one of these is still active. It is also to be noted that many of the other older doctors are still practicing.

The combined years of experience of the group exceeds 20,000 years, and it is pointed out that the fifty-year span of their practices has included a most sensational advance in medical science. They will all become charter members of a newly organized "Fifty-Year Club of the Medical Society of the State of New York."

———SIMA———

Stanford Eye Bank

The *Bulletin of the San Francisco County Medical Society* reports on the activities of the Stanford Eye Bank, which recently completed its first year of existence. The bank is operated by Stanford Medical School. It receives and supplies corneas for the entire Pacific Coast area, and is able to ship specimens by air over considerable distances if they are properly protected in special containers.

Thirty-three corneas were supplied for grafting operations during the first year. Twenty of these were obtained from individuals who willed their eyes for this purpose, while ten of the eyes came from living people who lost them by enucleation for injury or disease.

The bank does not preserve and store the specimens for any appreciable length of time, but functions primarily to maintain a registry of patients who are suitable for the operation of corneal transplantation, and makes the necessary arrangements for them when a donated cornea becomes available. It is stated that approximately one blind person in twenty has a type of blindness which can be remedied either partially or wholly by the cornea transplant operation.



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Merle L. Youngs PRESIDENT

What's Going On In Indiana by the Executive Secretary

Getting Information to Physicians. One of the greatest problems in medical organization work is how to inform physicians about activities of their own state society and on subjects of a medico-economic nature. Surveys reveal that nearly every doctor reads the scientific articles in his state journal, but few take the time to go through page after page of minutes or reports on nonscientific topics. Maybe the journals are at fault; maybe the style of news presentation should be changed so that the important events are emphasized and can be read quickly. At any rate, many state societies are augmenting their monthly journals with news letters written in a to-the-point style. They are mailed to the entire membership or only to officers and committee chairmen at the state, district and county levels. The theory behind the news bulletin is that the doctor, getting it in his mail, will read it in his office or take it with him and read it when he has time. The news letter idea is to be given a trial in Indiana. "ISMA News Flashes" will be the bulletin's name, and it will be put out by the Committee on Public Relations. The mailing list will be small at first, but will be expanded to the entire membership in the event the bulletin "goes over."

——ISMA——

Physicians in Law Organizations. Because their practices exact so much of their time, not many physicians enter into civic and community activities. For this reason many lay groups, particularly those in the health field, do not understand medicine's viewpoint and miss the knowledge and experience of physicians in planning their programs. On the other hand, many misunderstandings might be avoided if physicians aligned themselves more closely with the lay organizations. It is encouraging to see two state-wide associations headed by physicians—The Indiana Public Health Association, of which Dr. Walter L. Portteus of Franklin is president, and the Indiana Social Hygiene Association, of which Dr. A. F. Weyerbacher of Indianapolis is president. Dr. Leroy E. Burney, state health commissioner, is president-elect of the Indiana Public Health Association, and Dr. John Jennings, also of Indianapolis, has just completed a term as president of the Indiana Tuberculosis Association. Many physicians are active in the aforementioned organizations and others, as well. In every county there are groups which would welcome the help of doctors. It is medicine's opportunity to assume leadership . . . to carry the ball toward the right goal.

Attendance at District Meetings. One district meeting was held in April, ten in May and one in June. Attendance at these meetings, with one exception, ran 30 per cent or less of the physicians in the districts, a disappointing average. The district meetings are important in medical organization. At the district gatherings councilors are elected, who, in fact, are the board of directors of the state association. The district meetings afford opportunity for discussion of medical problems, of which there are many, as well as the opportunity to hear excellent scientific papers. Committees often go to great pains to arrange entertainment, including golf, luncheons, cards, etc. Either the president or president-elect of the state association was present at eleven of these meetings and presented his views on subjects vital to medicine. The programs, it would seem, would appeal to physicians. But the question of how can district meetings attract more doctors remains unanswered.

——ISMA——

Emergency Medical Service. Public relations of the medical profession in Indiana are being improved by establishment of adequate emergency medical service by many county medical societies. The Indianapolis Medical Society is the latest society to heed the "I-can't-get-a-doctor" complaint. Approximately seventy-five members of the society agreed to take emergency calls on Sundays, holidays, Wednesday afternoons and nights. Their names and telephone numbers were given to the Indianapolis hospitals, police and fire departments and the two telephone answering services. The society bought space in the classified section of the new telephone book (where physicians' names are listed) to inform citizens how they can get a physician in the event their family doctor isn't available. Right or wrong, the public expects the medical profession to provide medical service on a twenty-four hour, seven-days-a-week basis, says Dr. Daniel Beltz, chairman of a Special Committee on Improvements of Emergency Medical Services of the Los Angeles County Medical Association, who adds: "A curt, 'the doctor doesn't make home calls' is the best possible argument for the politicians to use to fasten on us the responsibility for lack of adequate medical care. As an organization we must accept this challenge and provide home care for patients."



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Plan NOW to come to Indianapolis EARLY Tuesday, October 26, 1948. The first classes in the Instructional Course Program will convene at 11:00 A.M.

The number of classes will be increased to 30 for this session and a schedule will be made permitting selection of as many as 5 of these without conflict with other programs of the day.

The subjects offered are to be those in which members in private practice have daily contact and interest. No class should fail to provide actual working tools to be taken home and used. It is down-to-earth—grass-roots —bread-and-butter instruction.

The courses will be similar to those of past years, but changes are still possible. If you want a special topic, write to the committee now. We want the subjects to be the ones you want to hear.

Each year of these Instructional Courses a majority of them have been "sold out" prior to the session on pre-session mail order. Schedule and order blank will appear first in the September JOURNAL. *Look for it.*

Help us help you!!

The Committee:

HERBERT L. EGBERT.
J. LAWRENCE SIMS.
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Average dose: 2 or 3 drops in each nostril.

No appreciable interference with ciliary action. Virtually no side reactions.

FOR NASAL USE: 1/4% solution (plain and aromatic), 1 oz. bottles; 1% solution, 1 oz. bottles; 1/2% water soluble jelly, 5/8 oz. tubes.

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News Notes

Dr. W. A. Hoppenrath, of Elwood, is retiring from active practice after fifty-five years in the practice of surgery. He opened his office in Elwood May 22, 1893, and has practiced there since that time.

Dr. F. A. Malmstone, of Griffith, has announced that Dr. Lawrence R. Sanford, formerly of Lansing, Illinois, is now an associate of his in the practice of medicine. Doctor Sanford is a graduate of Northwestern University School of Medicine, in 1945, and he spent two years with the Army Medical Corps, in the United States and in Berlin.

Dr. John J. Farris has opened an office for the general practice of medicine in Washington. Graduating from the Indiana University School of Medicine in 1944, he served an internship in South Bend before entering the Army in February 1945. Serving as a captain in the Medical Corps, Doctor Farris was stationed at McGuire General Hospital, in Richmond, Virginia, and later served in Japan. He recently completed his internship and residency at Indianapolis General Hospital.

Presentation of the Goethe Link Observatory to Indiana University by Dr. and Mrs. Goethe Link, of Indianapolis, was announced on June eleventh by the Board of Trustees of the university. Dr. and Mrs. Link also made a bequest of additional property in Indiana to the university through the Goethe and Helen Link Foundation for Scientific Research. The income will be used to maintain the observatory, which was completed in 1939 and is situated near Brooklyn.

Believed to be the oldest practicing physician in Bartholomew County, Dr. Lewis D. Reed, of Hope, is in his fifty-ninth year of practice. At the age of eighty-four, he still makes calls and maintains an office. He has practiced in Hope since 1895, and is a member of the Fifty-Year Club of the Indiana State Medical Association.

Dr. M. Richard Harding has returned to Indianapolis to resume the practice of ophthalmology with his father, Dr. Myron S. Harding, at 308 Hume-Mansur Building. Doctor M. Richard Harding has just completed a postgraduate course in ophthalmology at the University of Pennsylvania Graduate School of Medicine.

Dr. Joseph H. Tuchman has announced the opening of an office for the general practice of medicine at 845 Grove Street, in Indianapolis. A graduate of Indiana University School of Medicine, Doctor Tuchman spent one year of internship at Indianapolis General Hospital, and two years of surgical training in St. Louis. For the past year he has been with the Veterans Administration, engaging in general practice.

At the second annual meeting of the Indiana Public Health Association, in Indianapolis, on June second and third, Dr. Walter L. Portteus, of Franklin, was installed as president. Dr. L. E. Burney, state health commissioner, was chosen as president-elect of the association. Indiana physicians who appeared on the program were Dr. George M. Brother, Director of Preventive Medicine, State Board of Health; Dr. F. R. N. Carter, City Health Officer of South Bend; Dr. Charles A. Zeller, Director of the Indiana Council for Mental Hygiene, and Dr. W. L. Portteus, who presided.

Dr. R. M. Seibel and Dr. K. D. Schneider have opened offices at Nashville and Morgantown, and they will alternate office hours at both places. Natives of Iowa, both Doctor Seibel and Doctor Schneider are graduates of the University of Iowa, and both of them have completed one year's work at the Methodist Hospital, in Indianapolis.

The Chicago Medical Society Offers Postgraduate Courses

The Chicago Medical Society is sponsoring two Postgraduate Courses in September to be given in Thorne Hall on the campus of Northwestern University Medical School, Lake Shore Drive and Superior Street, Chicago.

The first course in HEMATOLOGY AND NEUROLOGY will be given the week of September 13-18, 1948. The second course in CARDIOVASCULAR AND RESPIRATORY DISEASES will be offered the week of September 20-25.

Distinguished faculties of 58 from all over the United States will give the courses. There will be lectures, round tables, and intermissions, which will give those taking the courses opportunity to meet and talk with the faculty.

Both courses are limited to 100 and are open to physicians in good standing in their local medical societies. For copy of program and application write Doctor Willard O. Thompson, Chairman, Committee on Postgraduate Medical Education, Chicago Medical Society, 30 North Michigan Avenue, Chicago 2.



The weight curves represented above are to be found in actual hospital (name on request) records of 75 *consecutive* infants fed on Similac for six months or longer. Not once in this entire series of 75 cases was it necessary to change an infant's feeding because of gastro-intestinal upset.

Similarly good uniform results are constantly being obtained in the practice of many physicians who prescribe Similac routinely for infants deprived, either wholly or in part, of mother's milk.

ACCEPTED AMERICAN MEDICAL ASSN. Council on Foods and Nutrition

A powdered, modified milk product especially prepared for infant feeding, made from tuberculin tested cow's milk (casein modified) from which part of the butter fat has been removed and to which has been added lactose, cocoanut oil, cocoa butter, corn oil, and olive oil. Each quart of normal dilution Similac contains approximately 400 U.S.P. units of Vitamin D, and 2500 U.S.P. units of Vitamin A as a result of the addition of fish liver oil concentrate.

SIMILAC *Similar to breast milk*

M & R DIETETIC LABORATORIES, INC. • COLUMBUS 16, OHIO

Dr. N. K. Forster, formerly of Hammond, and former associate editor of THE JOURNAL, has announced the opening of an office for the general practice of medicine and surgery at 15304 Sunset Boulevard, Pacific Palisades, California.

The **Chicago Ophthalmological Society** announces its Second Annual Clinical Conference, to be given November 29 to December 4, 1948. Special attention will be paid to the pathology and clinical aspects of glaucoma and retinal diseases. Recent advances in general ophthalmic therapeutics will also be presented. The class will be limited to fifty. For further information, address: Miss Maud Fairbairn, 8 West Oak Street, Chicago 10, Illinois.

The thirty-fourth Clinical Congress of the **American College of Surgeons** will be held in Los Angeles, from October 18 to 22, 1948. Headquarters will be at the Biltmore Hotel. Dr. Donald G. Tollefson, of Los Angeles, is chairman of the Committee on Arrangements.

Dr. and Mrs. Carl H. McCaskey, of Indianapolis, will leave by airplane August 25 for Honolulu, Hawaii, where Doctor McCaskey is to give a paper on "Surgery of Laryngeal Disease" September 7 before the Pan Pacific Surgical Association, composed of all countries bordering upon the Pacific ocean. They will return by air and will arrive in Indianapolis September 18.

Dr. Max D. Bartley, of Indianapolis, has reopened the ophthalmological practice of his late father, Dr. Donald A. Bartley, at 803 Hume Mansur Building, in Indianapolis. Doctor Max Bartley was separated from service on March twenty-sixth, after having been in service for approximately thirty months. He served at Wakeman General Hospital for one year as assistant chief of eye service, then at Tilton General Hospital as chief of eye service, for the last year and a half. A graduate of the Indiana University School of Medicine in 1943, Doctor Bartley interned at Indianapolis General Hospital, where he also served as resident until entering the service.

Dr. Elgin P. Kintner, of Goshen, began a three year residency in pathology, on July first, at Nichols Hospital, in Louisville, Kentucky. For the past twenty months Doctor Kintner has been practicing in Goshen. His practice there has been taken over by Dr. M. Dale Kinzie, who has just completed his internship at St. Joseph Hospital in South Bend.

Announcement has been made of the marriage of Mrs. Mary Stewart Clegg, of Boston, to Dr. J. Jerome Littell, of Indianapolis, on May twenty-ninth, in Arlington, Virginia.

Discharged from the Army Medical Corps recently with the rank of captain, Dr. George M. Ellis opened an office in Connersville on June first for the general practice of medicine. A graduate of the University of Buffalo School of Medicine, Doctor Ellis interned at the Toledo Hospital, in Toledo, Ohio, and has been stationed at Veterans Hospital in Dayton for the past two years.

Dr. John B. McClellan, formerly of Muncie, has opened an office for the practice of medicine in Goodland. A graduate of the Indiana University School of Medicine, he served his internship and residency at St. Elizabeth Hospital, in Lafayette. He was a captain in the Army Medical Corps, and served for two years, one year of which was in an Army hospital at Camp Rucker, Alabama, and the second year having been spent in an Army hospital at Salzburg, Austria. Before returning home from Austria, Doctor McClellan took postgraduate work at the University of Vienna. For the past year he has been practicing in West Lafayette.

After forty-four years of practice in Rockport and Spencer County, Dr. J. C. Glackman, Sr., retired on May twenty-ninth. He and his family have moved to Denver, where they plan to make their home.

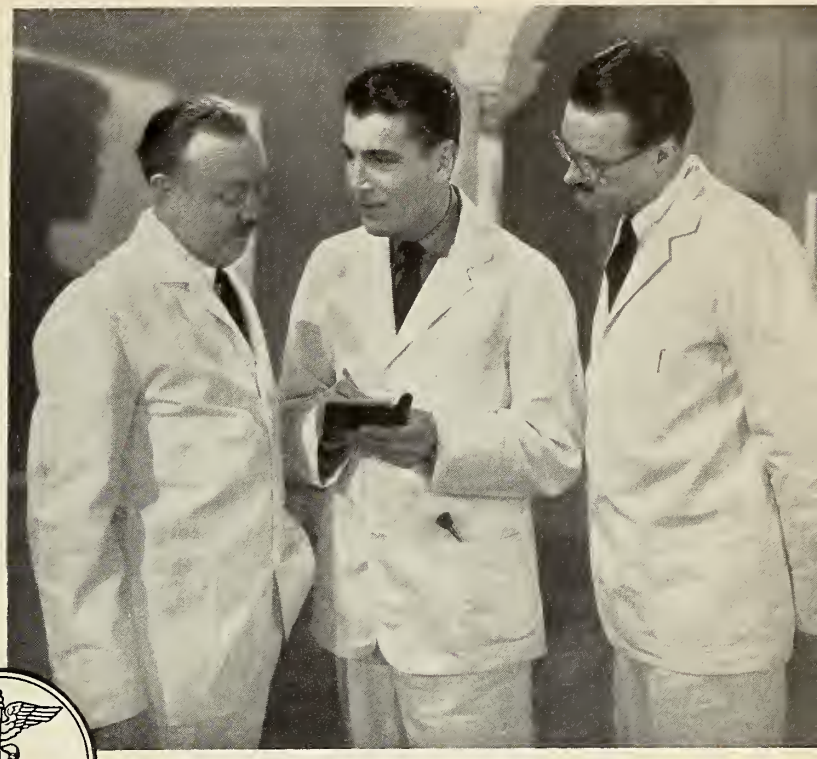
Dr. Frank M. Gastineau, of Indianapolis, was appointed recently as a member of the Indianapolis Board of Health, for a four-year term.

Dr. Frank D. Hogle, of Plymouth, was recently appointed to the staff of the Logansport State Hospital. He had been in private practice in Plymouth, and during World War II had been connected with the Long Beach Naval Hospital, at Long Beach, California.

Dr. O. T. Kidder, medical director of the Irene Byron Sanatorium of Fort Wayne, was elected president of the Indiana Trudeau Society at its annual conference in May.

A postgraduate course on Modern Treatment of Fractures and Other Traumatic Conditions will be given at Massachusetts General Hospital, September 20-29, 1948, under the auspices of Harvard Medical School. Further information may be obtained by writing to the Assistant Dean, Courses for Graduates, Harvard Medical School, 25 Shattuck Street, Boston, Massachusetts. This course is covered by the G. I. Bill of Rights.

DOCTOR! HAVE YOU--?



(overheard in the corridor of one of our hospitals)

For the past several weeks I have been giving more and more thought to our Doctors' Plan, and boys it has just come home to me—this Plan means everything to us as a profession. Sure, I know, some of us thought it was (***) crazy that our society sponsor an Insurance Company. We wondered what business we had in this, of all things. Some of us thought it was just another idea cooked up by some of the fellows and still go along with this line of thinking—and some of us are still skeptical and even wonder about the indemnities—"trying to tell us what to charge" some of us say—BUT—listen fellows did you ever stop to think. We started this Plan because we felt there was a need among our patients, our friends, that no one was fulfilling. Sure there were insurance plans but look what they cost our people, look what they and we received. We, I realize now, wanted to provide a non-profit way that our friends could pre-pay our charges, in an easy convenient way. We realized that if this was to be done, we ourselves had to do our own job—or let the government do it for us—and fellows the allowances of our own Plan are the most liberal of any Plan that can be bought today. You know what! I am recommending to every one of my patients that they secure our Doctors' Plan and the Blue Cross Plan for themselves and their families. I put that material I received a few weeks ago in my waiting rooms, and the interest my patients expressed in these Plans is the thing it took to wake me up to the fact that we are doing something for our friends. I've even had to write requesting more literature be sent me as my patients are really carrying it out of my office.

(an expression by an Indiana Doctor)

Tell your patients about

THE DOCTORS' PLAN

Our own plan for prepaid medical care

Help create a local demand—we will fill it

FACTS
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CLAIMS PAID
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AMOUNT PAID
$681,391

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ARMY PERSONNEL SYPHILIS RECORDS AVAILABLE

The Veterans Administration has in its custody the majority of syphilis records of those Army personnel who were treated for this disease while in active service, and in many instances can procure informative data from the syphilis records of other than Army personnel. It is thought that many physicians treating veterans for syphilis as private patients would find a resume of the syphilis record useful since the details of treatment, results of spinal fluid examinations, and blood serologies are incorporated in the records.

Resumes of these records are available to physicians who are treating such veterans provided authorization for the release of the data is given by the veteran. Requests for the resumes accompanied by an authorization for the release of the data, dated and signed by the veteran, should be addressed to the Dermatology and Syphilology Section, Veterans Administration, Munitions Building, Washington 25, D.C. It is most important that the veteran's Service Serial Number and other identifying information, such as the date of enlistment, the date of discharge, rank, and organization be included.

Ordinarily, the resumes can be furnished in approximately two weeks from the date of the receipt of the request and signed authorization.

Deaths

William V. Woods, M.D., of Indianapolis, died on June third at the age of forty-five. He had practiced in Indianapolis for seventeen years, after graduating from the Indiana University School of Medicine in 1929. Doctor Woods limited his practice to orthopedic surgery, and was assistant professor of orthopedic surgery at the Indiana University School of Medicine. He was a member of the Indianapolis (Marion County) Medical Society and the Indiana State Medical Association, and was a Fellow of the American Medical Association.

Earle C. McBride, of Terre Haute, died suddenly on June fifth at his home. He was seventy-three years of age. Doctor McBride graduated in 1907 from the University of Louisville School of Medicine. He was a member of the Vigo County Medical Society, the Indiana State Medical Association, and the American Medical Association.

Anthony E. Otto, M.D., of Alexandria, died on June third at the age of eighty-six. He was a member of the Fifty-Year Club of the Indiana State Medical Association. He was a graduate of the Medical College of Ohio, in Cincinnati, in 1883. Doctor Otto was an honorary member of the Madison County Medical Society and the Indiana State Medical Association, and was a member of the American Medical Association.

Lotus M. Slabaugh, M.D., city health officer of Nappanee, died on May twenty-first. He was forty-seven years of age. Doctor Slabaugh was a graduate of the Hahnemann Medical College and Hospital of Philadelphia in 1928, and was engaged in the practice of medicine with his father, Dr. J. S. Slabaugh. He was a member of the Elkhart County Medical Society, the Indiana State Medical Association, and the American Medical Association.

William E. Barnes, M.D., of Evansville, died on May twenty-third at a hospital in Lebanon, Tennessee. He became ill while en route to Tennessee. He was fifty-six years of age. Doctor Barnes was a graduate of the Indiana University School of Medicine in 1916. He had retired from practice.

J. Preston Christie, M.D., of North Madison, died at the age of sixty-five on June second. Doctor Christie was a graduate of the Indiana Medical College, School of Medicine of Purdue University, at Indianapolis, in 1907.

Henry H. Deen, M.D., of Leavenworth, died on May twenty-ninth at the age of seventy-one. He had been in ill health for several months. Doctor Deen was a graduate of the Hospital College of Medicine, Louisville, in 1906. He was a member of the Crawford County Medical Society, the Indiana State Medical Association and the American Medical Association.

Herschel W. Goss, M.D., of Indianapolis, died May twenty-first at his home. He was forty-four years of age. A graduate of the Indiana University School of Medicine, in 1929, Doctor Goss had practiced since that time in Indianapolis. He was a member of the Indianapolis (Marion County) Medical Society, the Indiana State Medical Association and the American Medical Association.

Charles M. McNaull, M.D., who practiced in Indianapolis for more than fifty years, died on May sixteenth at the age of eighty-four. He had recently retired from practice. Doctor McNaull graduated in 1891 from the Bellevue Hospital Medical College, in New York City. He was an honorary member of the Indianapolis (Marion County) Medical Society and the Indiana State Medical Association, and was a Fellow of the American Medical Association.

Experience is the Best Teacher



Paul Ehrlich
(1854-1915)
proved it in chemotherapy

Paul Ehrlich, expanding on his knowledge gained as a pupil of Koch, concluded from his experiences in the staining of bacteria that there was a close chemical affinity between the cellular body and the stain. This idea led him to believe that specific drugs could be found which would kill invading pathologic organisms, without damage to the host. His conclusions helped create the science of chemotherapy, which is increasingly important today.

Experience is the best teacher in cigarettes too!

Yes! Experience counts—today as always. And with the thousands and thousands of smokers who have tried and compared many different brands of cigarettes, Camels are the "choice of experience."

Try Camels yourself! See how your taste welcomes the rich, full flavor of Camel's choice, properly aged, expertly blended tobaccos. And see how your throat appreciates Camel's cool, cool mildness.

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More Doctors Smoke CAMELS
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Three independent research organizations in a nationwide survey asked 113,597 doctors to name the cigarette they smoked. More doctors named Camel than any other brand.

Society Reports

INDIANA STATE MEDICAL ASSOCIATION

COMMITTEE ON PUBLICITY

April 30, 1948

Present: Homer G. Hamer, M.D., chairman; James O. Ritchey, M.D.; Marlow W. Manion, M.D.; Cleon A. Nafe, M.D., and Ray E. Smith, executive secretary.

The following "Hints on Health" columns were approved for release:

Week of June 7, 1948—"Pregnancy Care."

Week of June 14, 1948—"Baby's Health."

Week of June 21, 1948—"Undulant Fever."

Letter from Radio Station WFBM announcing that the broadcast time was being changed from 4:15 p.m. Saturdays to 9:00 a.m. Saturdays, beginning May 8, was read.

The executive secretary announced that the Radio Committee of the Woman's Auxiliary would use the broadcast period May 29 for a "live" program.

Report was made by the executive secretary that copies of Maurice Early's column in the April 30 issue of The Indianapolis Star have been mailed to Lawrence Rember, executive assistant to Dr. George F. Lull, general manager of the American Medical Association, and to the president-elect of the Indiana State Medical Association, who will attend the National Health Assembly in Washington, D. C., and that the president-elect was going to discuss the printed statements by Federal Security Administrator Oscar R. Ewing with Mr. Ewing.

COMMITTEE ON PUBLICITY

May 14, 1948

Present: Homer G. Hamer, M.D., chairman; James O. Ritchey, M.D.; Marlow W. Manion, M.D., and Ray E. Smith, executive secretary.

A "Hints on Health" release entitled "Swimming Advice" for release of week of June 28, 1948, was approved.

Script on "Anesthesia" prepared by the Radio Committee of the Woman's Auxiliary, for use over WFBM Saturday morning, May 29, 1948, was approved with corrections.

An article entitled "Centennial of the American Medical Association" was approved for use by the Woman's Auxiliary with certain deletions.

Purchase of sixty sets of pamphlets against socialized medicine from the Shearon Medical Legislative Service at a total cost of $37.50 was approved.

Speakers were provided as follows:

May 25, 1948—Porter County Medical Society, Valparaiso.

June 2, 1948—Indiana Public Health Association banquet, Indianapolis.

June 2, 1948—Fifth District Medical Society meeting, Old Trail Inn, near Greencastle.

June 3, 1948—Fountain-Warren County Medical Society, Covington.

COMMITTEE ON PUBLICITY

May 28, 1948

Present: Homer G. Hamer, M.D., chairman; James O. Ritchey, M.D., Marlow W. Manion, M.D., and Ray E. Smith, executive secretary.

The following "Hints on Health" columns were approved:

Week of July 5, 1948—"Gum Infection."

Week of July 12, 1948—"Heat Exhaustion."

The secretary was authorized to order pamphlets put out by the Research Council for Economic Security, if any opposing compulsory sickness insurance were deemed appropriate for distribution.

The compilation of material against government sickness insurance into packets, for distribution to college and university libraries, and for individuals who request information on the subject, was approved by the committee.

Letter from Lawrence W. Rember, executive assistant, American Medical Association, in which he commented on statements made by Oscar R. Ewing, Federal Security Administrator, in *The Indianapolis Star*, was read.

COUNCILOR DISTRICT MEETINGS

FIRST DISTRICT

Meeting in Evansville on May 27, the First District Medical Society elected Dr. Virgil McCarty, of Princeton, president; Dr. Willard T. Barnhart, of Evansville, vice-president, and Dr. William O. Denzer, also of Evansville, secretary-treasurer. The place for the 1949 meeting will be decided later.

The district meeting was held in connection with the May graduate education course of the Vanderburgh County Medical Society, the program for which appeared in the May issue of THE JOURNAL. Dr. Herman M. Baker, chairman of the committee on Medical Education and Hospitals of the I.S.M.A., presided. Various angles of medical economics were discussed by the speakers.

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Impairment of physical and mental activity is often the lot of the menopausal woman, beset as she is with distressing somatic and emotional symptoms.

With **"Premarin,"** *such vagaries of the climacterium may be prevented. In addition to prompt relief of physical discomfort following therapy, many patients attest to a "sense of well-being" marking the difference between inactive and spirited existence... the "plus" in* **"Premarin"** *therapy that gives the middle-aged woman a new lease on useful and pleasurable living.*



Because **"Premarin"** *is available in three potencies, the physician is able to adapt estrogenic therapy to the particular needs of the patient. Tablets are available in 2.5 mg., 1.25 mg. and 0.625 mg.; liquid, 0.625 mg. in each 4 cc. (1 teaspoonful).*

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SECOND DISTRICT

Dr. William C. (Dick) Reed, of Bloomington, was elected councilor of the Second District at the annual Second District Medical Association meeting at Bloomington, May 20. He will succeed Dr. James H. Crowder, of Sullivan, who did not seek re-election, on January 1, 1949.

Sullivan was selected for the 1949 meeting city. Dr. Jacob T. Oliphant, of Farmersburg, was elected president of the district association and Dr. J. S. Brown, of Carlisle, was re-elected secretary-treasurer.

The scientific program in the afternoon consisted of lectures on "Recent Studies in the Chemistry of Toxoids and Their Relation to Immunization," by Leland S. McClung, Ph.D., associate professor of bacteriology, Colleges of Arts and Sciences, Indiana University; and "Problems of Cancer of the Colon and Rectum," by Dr. Frank B. Ramsey, of Indianapolis, associate professor of surgery, Indiana University School of Medicine. The program concluded with a colored motion picture entitled "Anomalies of the Bile Ducts."

Dr. Philip T. Holland, president of the Owen-Monroe County Medical Society, opened the evening program with an address of welcome, which was followed by remarks by Ray E. Smith, of Indianapolis, executive secretary of the Indiana State Medical Association.

"Medical Organization Problems" was the subject of the principal address of the evening, delivered by Dr. Cleon A. Nafe of Indianapolis, president of the state association.

THIRD DISTRICT

Members of the Third District Medical Society, meeting in French Lick May 26, voted to hold their 1949 meeting in Corydon, and elected Dr. William E. Amy, of Corydon, president, and Dr. John L. Gwinn, also of Corydon, secretary.

The scientific program consisted of an essay by Dr. John D. Trawick, Jr., of Louisville, assistant professor of psychiatry, University of Louisville School of Medicine, on "Clinical Experiences in Psychosomatic Medicine," and a paper by Dr. Richard M. Nay, of Indianapolis, on "The Use of Anticoagulants in Myocardial Infarction."

Dr. Cleon A. Nafe, of Indianapolis, president of the Indiana State Medical Association; Dr. A. P. Hauss, of New Albany, president-elect; and Ray E. Smith, of Indianapolis, executive secretary, spoke at the luncheon.

Dr. Keith Hammond, of Paoli, district society president, presided at the luncheon, and Dr. William H. Garner, of New Albany, councilor, presided at the morning session.

FOURTH DISTRICT

Dr. George A. May, of Madison, was elected councilor of the Fourth district to succeed Dr. Oscar A. Turner, also of Madison, at the annual Fourth District Medical Society meeting held at Batesville May 19. Doctor Turner resigned, and Doctor May will serve his unexpired term which extends until December 31, 1950.

Dr. Charles N. Manley, of Rising Sun, was elected president of the society; Dr. D. D. Dickson, of Greensburg, was named vice-president, and Dr. F. A. Streck, of Lawrenceburg, was chosen secretary. The Dearborn-Ohio County Medical Society will be host to the group in 1949, the meeting place to be decided later.

The meeting began with a golf tournament at the Hillcrest Country Club and a session of delegates at noon. After the Blue Cross Hospital Service and Mutual Medical Insurance, Inc., were discussed by Albert Stump, Guy Spring and R. S. Saylor, all of Indianapolis, scientific papers were presented by Drs. Louis G. Hermann, Frank H. Mayfield and Joseph L. DeCourcy, all of Cincinnati. The ladies, meantime, visited the American Furniture Factory and played cards.

The wives joined their husbands for the banquet in the Legion home in the evening. Dr. A. P. Hauss, of New Albany, president-elect of the Indiana State Medical Association, and Dr. Guy A. Carpenter, pastor of the First Methodist Church, Vincennes, were the speakers.

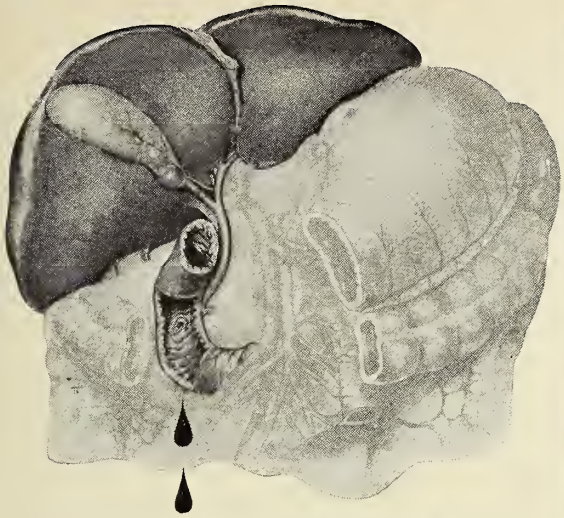
FIFTH DISTRICT

A symposium on hypertension featured the scientific session of the Fifth District Medical Society meeting held at Old Trail Inn, near Greencastle, June 2. Indianapolis physicians presented the subject, as follows: "Recent Experimental Work on Hypertension," by Dr. Kenneth G. Kohlstaedt, "Medical Phase of Hypertension," by Dr. James O. Ritchey, and "Recent Surgical Progress on Hypertension," by Dr. Dwight W. Schuster.

Dr. A. M. Mitchell, of Terre Haute, was re-elected councilor. Society officers elected were Dr. J. F. Maurer, of Brazil, president; Dr. George F. Parker, of Greencastle, vice-president; and Dr. M. C. Topping, of Terre Haute, secretary-treasurer. Brazil was selected for the 1949 meeting place.

Dr. A. P. Hauss, of New Albany, president-elect of the Indiana State Medical Association, spoke at the dinner in the evening.

In the morning a group enjoyed golf at the Greencastle Country Club.



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*Albrecht, F. K.: Modern Management in Clinical Medicine, Baltimore, The Williams and Wilkins Co., 1946, p. 170.

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EIGHTH DISTRICT

Physicians of the Eighth district were guests of the Delco-Remy Division of General Motors at the annual meeting at Anderson May 19, and heard addresses by Dr. Clarence Selby of Detroit, medical consultant of General Motors Corporation, and Dr. James G. Townsend of Washington, D. C., chief of the Division of Industrial Hygiene, U. S. Public Health Service.

In the afternoon the physicians toured Plants Three, Seven and Ten and inspected the Plant One medical facilities and safety equipment display. Dinner was served at the Anderson Country Club following a social hour.

Dr. E. H. Clauser, of Muncie, was re-elected councilor at a short business meeting preceding the speaking program. Dr. Joseph H. Clevenger, of Muncie, was named president, and Dr. Ramon A. Henderson, also of Muncie, was chosen secretary-treasurer. Muncie was selected as the 1949 meeting place.

Dr. Fred B. Wishard, medical director of Delco-Remy Division and president of the district society, presided. He introduced a number of the General Motors executives in Anderson, including O. V. Badgley, general manager, Delco-Remy Division, and a vice-president of General Motors.

Among the guests were many physicians from other districts, including Dr. Cleon A. Nafe, of Indianapolis, president of the Indiana State Medical Association.

ELEVENTH DISTRICT

Dr. C. S. Black, of Warren, was re-elected councilor of the Eleventh district at the seventy-ninth semi-annual Eleventh Indiana Councilor District Medical Association meeting in Wabash May 19. Dr. W. W. Holmes of Logansport was named president, and Dr. O. G. Brubaker, of North Manchester, was elected secretary-treasurer for the twenty-first time. The next meeting will be held in Kokomo, Wednesday, September 15.

Dr. S. D. Malouf of Peru, retiring president, presided. Reports were made by Dr. Brubaker, Dr. Black and Dr. E. B. Jewell, of Logansport, necrologist. The audience stood in a minute of silence in memory of the late Drs. J. D. McKay and J. F. Loomis, both of Marion.

Dr. Cleon A. Nafe of Indianapolis, president of the Indiana State Medical Association, and Ray E. Smith of Indianapolis, executive secretary of the state association, were guests and spoke briefly.

The scientific program consisted of a lecture on "Modern Surgical Treatment of Peptic Ulcer," by Dr. R. Arnold Griswold, of Louisville, professor and the head of the Department of Surgery, University of Louisville School of Medicine, a native of Peru; and a discussion of "Pediatrics and the General Practitioner," by Dr. Russell R. Hippensteel, of Indianapolis, assistant professor of pediatrics at the Indiana University School of Medicine, a native of North Manchester.

The physicians' wives were entertained at the Wabash Country Club at tea, and later joined their husbands for a trip through the Honeywell Memorial building. Eiffel G. Plasterer, of Huntington, presented "The Bubbles Concerto" at the banquet in the evening.

Drs. R. M. La Salle, J. F. Mills and L. Z. Bunker composed the committee on arrangements. Ladies entertainment was arranged by Mrs. La Salle, Mrs. Mills and Mrs. F. M. Whisler.

LOCAL SOCIETY REPORTS

Adams County Medical Society members met at the Adams County Memorial Hospital, in Decatur, on May eleventh. Dr. Samuel Mercer, of Fort Wayne, was the guest speaker.

Clinton County Medical Society members held a meeting on June first at the Clinton County Hospital, in Frankfort. The twelve members present were shown motion picture films of electrocardiograms, as well as the embryological development of the chick heart, by Dr. A. Earl Applegate, of Frankfort.

Elkhart County Medical Society members met at the Hotel Elkhart, in Elkhart, on May sixth. Guest speaker was Dr. Lowell D. Snorf, chief of medical services at Evanston Hospital, Evanston, Illinois, whose subject was "Causes and Management of the Diarrheas." Fifty-six members were present.

Fayette-Franklin County Medical Society met at the Country Club in Connersville, on May eleventh, when motion and sound pictures on peptic ulcers, hand infections, and child psychology were shown. Fifteen members were present.

Fort Wayne (Allen) County Medical Society members held their annual meeting on May eighteenth, at the Fort Wayne Chamber of Commerce. Sixty members were in attendance.

Greene County Medical Society members held a meeting at Freeman Greene County Hospital, in Linton, on May thirteenth. This was a business and dinner meeting, and the fourteen members present heard Dr. Harry G. Rotman, of Jasonville, speak on "Myocarditis."

Hendricks County Medical Society members met at Avon, on May sixteenth. Dr. Palmer Eicher, of Indianapolis, spoke on "Common Conditions of the Feet." Fifteen members were present.

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Howard County Medical Society held a meeting at the Duke restaurant, in Kokomo, on May seventh. Guest speaker was Dr. Russell Henry, of Indianapolis, whose subject was "Diagnosis of Tuberculosis." Thirty members and guests were in attendance.

Kosciusko County Medical Society members met at the Camel Club, in Warsaw, on May fourth. Dr. Dan Urschel, of Mentone, talked on "Heart Failure." There were ten members present.

St. Joseph County Medical Society members met at the Indiana Club, in South Bend, on May eleventh. The sixty-nine members and guests present heard Mr. J. Paul Revenaugh speak on "The Business and Economic Side of Medical Practice."

Tippecanoe County Medical Society members met at the Lincoln Lodge, in Lafayette, on May eleventh. Dr. F. S. Crockett, of Lafayette, spoke on "Rural Medical Service." Fifty-five members and guests were in attendance.

Vanderburgh County Medical Society members met in the Hotel McCurdy, in Evansville, on May eleventh. Eighty-six members were present. The guest speaker was Dr. L. E. Burney, Indiana State Health Commissioner.

Wayne-Union County Medical Society members held a meeting at Reid Memorial Hospital, in Richmond, on May thirteenth. The thirty-three members present heard Dr. John D. Van Nuys, dean of Indiana University School of Medicine, speak on the expansion of the medical school, and the organization of regional postgraduate medical study.

Wells County Medical Society members held a meeting at the Caylor-Nickel Clinic, in Bluffton, on May seventeenth. Dr. S. M. Rabson, of Fort Wayne, spoke on "Recent Advances in Laboratory Procedures." Thirteen members were present.

WOMAN'S AUXILIARY to the Indiana State Medical Association

President-elect—Mrs. William Morrison, Kokomo.

President-elect—Mrs. Truman Caylor, Bluffton.

Corresponding Secretary—Mrs. Charles Viney, Logansport.

Recording Secretary—Mrs. Henry Bopp, Terre Haute.

Treasurer—Mrs. Wendell Kelly, Anderson.

Press and Publicity—Mrs. F. M. Gastineau, Indianapolis.

OUR GOAL

"Every Physician's Wife An Auxiliary Member"

Two new county auxiliaries have been organized recently. Miami County was organized April 16, at the Peru Community Center, with twelve members, five of them members-at-large. Mrs. R. E. Wildman was chairman of the meeting and was elected president. Several members from Logansport and Kokomo were present, including the following state officers: Mrs. W. R. Morrison, president; Mrs. Charles Viney, corresponding secretary; and Mrs. F. S. Cuthbert, historian.

At a recent district meeting, held at Frankfort, Mrs. Frank A. Beardsley entertained the wives of the doctors at a luncheon, and with the leadership of Mrs. Frank Gastineau, past state president, and Mrs. W. R. Morrison, president, the Clinton County ladies were organized. The fact that the Crawfordsville group, organized only a few weeks ago, was present, was an added incentive. Mrs. Claude A. Robison was elected president, with fifteen charter members present.

The work of organization is in charge of Mrs. Truman Caylor, of Bluffton, the new president-elect.

Miss Lucy Schuler, state legislative chairman, has been very active, making many contacts, and promises an interesting year on legislation.

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Books

Books received are acknowledged in this column, and such acknowledgment must be regarded as a sufficient return for the courtesy of the sender. Selections will be made for more extensive review in the interests of our readers and as space permits. Books listed in this department are not available for lending. Any information concerning them will be supplied on request.

* * *

BOOKS RECEIVED

WAR, POLITICS, AND INSANITY. By C. S. Bluemel, M.D., (Eng.) 121 pages. Cloth. Price $2.00. The World Press, Inc., Denver, Colorado, 1948.

* * *

NEUROANATOMY. By Fred A. Mettler, M.D., Associate Professor of Anatomy, College of Physicians and Surgeons, Columbia University, New York. Second Edition. 536 pages, with 357 illustrations, including 33 in color. Cloth. Price $10.00. The C. V. Mosby Co., St. Louis, 1948.

* * *

HISTORY OF THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Part II. 1833-1944. By the History Committee: John Benjamin Nichols, chairman, William Johnston-Mallory, Joseph Stiles Wall. 357 pages, with 14 illustrations. Cloth. Waverly Press, Inc. Baltimore, Maryland.

* * *

SUCCESSFUL MARRIAGE. Edited by Morris Fishbein, M.D., editor, *Journal of the A.M.A.*, and Ernest W. Burgess, Ph.D., Professor and Chairman, Department of Sociology, University of Chicago. 547 pages, with 16 illustrations. Cloth. Price $6.00. Doubleday & Company, Inc., Garden City, N. Y.

* * *

TEXTBOOK OF GENERAL SURGERY. By Warren H. Cole, M.D., Professor and head of Department of Surgery, University of Illinois College of Medicine, Chicago, and Robert Elman, M.D., Professor of Clinical Surgery, Washington University School of Medicine, St. Louis. Fifth edition. 1200 pages, with 920 illustrations. Cloth. Price $11.00. D. Appleton-Century Co., New York., 1948.

* * *

PHYSIOLOGY OF EXERCISE. By Laurence E. Morehouse, Ph.D., Associate Professor of Physical Education, University of Southern California; and Augustus T. Miller, Jr., Ph.D., Associate Professor of Physiology, University of North Carolina Medical School. 353 pages with 51 illustrations. Cloth. Price $4.75. St. Louis, Missouri: The C. V. Mosby Company, 1948.

* * *

REFRESHER COURSE IN MALE HORMONE THERAPY. By Ciba Pharmaceutical Products, Inc., Summit, New Jersey. This book contains abstracts of literature on this subject over a four-year period and has been taken entirely from accepted medical publications. It is available to the medical profession without charge.

BOOKS REVIEWED

CONCISE ANATOMY. By Linden F. Edwards, Ph.D., Professor of Anatomy, Ohio State University, Columbus, Ohio. 548 pages with 472 illustrations, some in color. Price $5.50. Cloth. The Blakiston Company, Philadelphia, 1947.

Students in the ancillary fields of medicine, such as Physical Therapy, Occupational Therapy, Medical Technology, Nursing, Dental Hygiene, Physical education, et al, should find in Professor Edwards' "Concise Anatomy" the answer to their needs for a comprehensive textbook of the basic principles of human anatomy. Professor Edwards' scope and the astute organization of this material is most commendable.

Robert L. Tornello, M.D.

* * *

400 YEARS OF A DOCTOR'S LIFE. Collected and Arranged by George Rosen, M.D., editor, Journal of the History of Medicine & Allied Sciences, and Beate Caspari-Rosen, M.D., New York. 429 pages. Paper. Price $5.00. Henry Schuman, Publisher, 20 East 70th Street, New York 21, New York.

This book is an anthology of episodes in the private lives of physicians in the last four hundred years and is gleaned from their letters, diaries and autobiographies. It gives intimate glimpses into the impelling motives that geared these celebrated doctors to eminence. Here is a delightfully interesting gift for any physician.

Charles N. Combs.

* * *

INFANT NUTRITION (A TEXTBOOK OF INFANT FEEDING FOR STUDENTS AND PRACTITIONERS OF MEDICINE). P. C. Jeans, M.D., Iowa City, Professor of Pediatrics, College of Medicine, State University of Iowa; and Williams McKim Marriott, M.D., late, Professor of Pediatrics, Washington University School of Medicine; Physician in Chief, St. Louis Children's Hospital, St. Louis. 516 pp., 36 illustrations. Fourth edition. Cloth, $6.50. C. V. Mosby Co., St. Louis.

Dr. Marriott's first book was on chemistry. The first edition of his textbook of infant feeding was based on physiological chemistry as applied to infant nutrition. Dr. Jeans has brought the many recent advances in nutrition into the present revised edition. The book is written to be useful both to the student and the practitioner. Every practitioner who has anything to do with infants can be benefited by reading every word of this book. It is concise, logical, and practical.

The first half of the book summarizes the nutritional requirements of the normal infant with the methods of meeting these requirements. The rest of the book has chapters dealing with prematurity, malnutrition, diarrhoea, vomiting, constipation, allergy, tetany, celiac disease, vitamin deficiencies, and the common infections in association with nutritional disturbances. A final chapter takes up descriptions of useful techniques in dealing with therapeutic problems of infancy such as the collection of blood, blood transfusion, the methods of parenteral administration of fluids, and gavage. There is a dosage table of the common drugs used in infancy.

Pierce MacKenzie, M.D.



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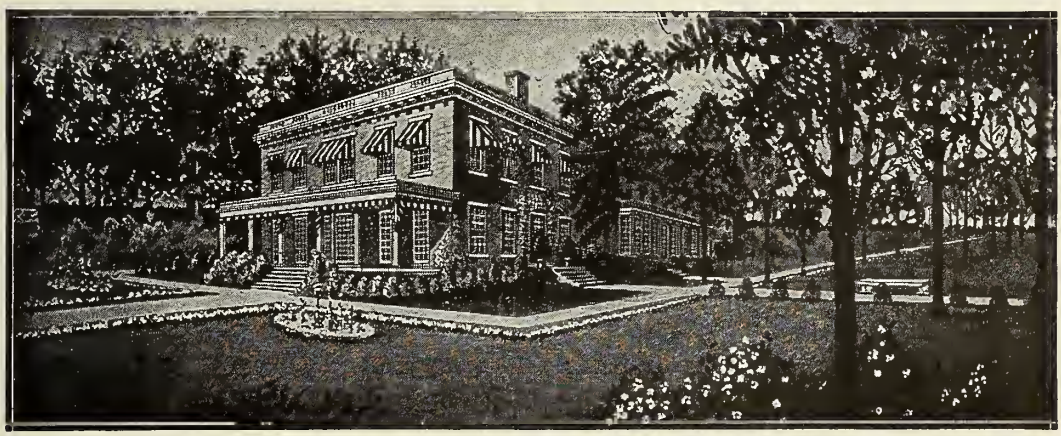
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HEADACHE. By Louis G. Moench, M.D., Assistant Clinical Professor of Medicine, University of Utah School of Medicine; Internist, Salt Lake Clinic, Salt Lake City. 207 pages. Price $3.50. Cloth. The Year Book Publishers, Inc., 304 South Dearborn Street, Chicago, 1947.

A reference on the subject of headache for the student and practitioner. Consideration is given to the etiology of headache on an anatomical and physiological basis.

Intracranial, systemic disorders, histamine, allergy, and emotional disturbances are discussed as causes of the symptom.

The subject matter is well classified, concisely written and easily readable.

A good reference book on the subject for the practitioner in all specialties and general practice.

R. R. Calvert, M.D.

* * *

DISEASES OF THE NOSE, THROAT and EAR. By William Lincoln Ballenger, M.D., Late Professor, School of Medicine, University of Illinois, Chicago; Howard Charles Ballenger, M.D., Associate Professor and Acting Chairman of the Department of Otolaryngology, Northwestern University School of Medicine, Chicago; and John Jacob Ballenger, M.D., Research Fellow in Otolaryngology, Northwestern University School of Medicine, Chicago. Ninth Edition, thoroughly revised; 993 pages with 597 illustrations and 16 color plates. Cloth. Price $12.50. Lea & Febiger, Philadelphia, 1947.

For many years Ballenger's text has been one of the leading reference books in its field. The ninth edition is most liberally changed. It is unique in its comprehensiveness. In addition to the material usually found in a work of this character, the final section presents bronchoscopy, direct laryngoscopy, esophagoscopy, and gastroscopy. There are many new diagrams, engravings, and plates which supplement the text. The work is based on a broad clinical viewpoint.

The new work on restoring hearing in otosclerosis is well written and clearly illustrated. A chapter on physiology and functional tests of the labyrinth by Alfred Lewy, M.D., F.A.C.S., is clearly illustrated with colored plates.

Drug therapy is given due attention. Treatment, other than by drugs, is carefully outlined. This is a book, not only for the general practitioner, but also for the specialist, as well.

Carl Trout, M.D.

* * *

PHARMACOLOGY THERAPEUTICS AND PRESCRIPTION WRITING. By Walter A. Bastedo, M.D., Consulting Physician, St. Luke's Hospital, New York, St. Vincent's Hospital, Staten Island, and the Staten Island Hospital; Member of Revision Committee, U. S. Pharmacopoeia. 840 pages, with 82 illustrations. Price $8.50. Cloth. W. B. Saunders Company, Philadelphia, 1947.

This 5th edition of Bastedo's Pharmacology is a rather comprehensive description of commonly used drugs, their physiological action and clinical application. Although the author does not allot much space to the description of the newer drugs, for example, the cardiac glycosides and the anticoagulants; the subject matter is otherwise well selected and presented. There are adequate numbers of graphs and illustrations. The type size and mode of presentation makes the volume easily readable. The index is satisfactory.

The book seems well suited as a reference book and probably ranks among the best single volumes on the subject.

P. W. Rothrock, M.D.

A MANUAL OF PHARMACOLOGY. By Torald Sollmann, M.D., Professor Emeritus of Pharmacology and Materia Medica in the School of Medicine of Western Reserve University, Cleveland. Seventh Edition. 1132 pages. Cloth. Price $11.50. W. B. Saunders Company, Philadelphia, 1948.

The Manual of Pharmacology gives a most comprehensive outline of current knowledge of drug actions, especially from the viewpoint of their importance in therapeutics and toxicology. The past few years have brought about extensive developments in this field which was greatly accelerated and intensified by the demands of World War II.

There are 995 pages of text in the book and an extensive bibliography. The book does not contain chapters, but rather the subject matter is well classified under specific titles and sub-titles with detailed descriptions of drugs, therapeutic uses, methods of administration and much other informative material.

Dr. Sollmann has given to the student, as well as the practitioner, a fine, practicable book on pharmacology. A new feature in this seventh edition is the arrangement of the text in two columns on the page, which should greatly facilitate the search for information.

F. R. Nicholas Carter, M.D.

* * *

MINOR SURGERY. By Frederick Christopher, M.D., Associate Professor of Surgery, Northwestern University Medical School. Sixth edition. 1058 pages, 937 illustrations. Cloth. Price $12.00. W. B. Saunders Company, Philadelphia, 1948.

Six editions of this book means that several thousand physicians already are well acquainted with it. Considering the nature of the book, one may feel sure that it is a constant desk companion and that a new edition is always welcome. A single French quotation on a page in the front of the book translates, "It is by the study of minor surgery that the surgeon begins his apprenticeship."

This book considers the conditions which make up the majority of every day surgical practice. It is invaluable to the general practitioner, the isolated practitioner, the resident surgeon and the intern.

It is based on the author's thirty years of practice in the outpatient department and the hospital. The author has not made it a one man book. He has made a thorough study of the surgical literature and has interspersed the main print with countless references to this literature by using direct quotations in paragraphs of smaller print.

Of especial value to the resident and intern are the chapters on minor surgical technique, preoperative and postoperative care, and the surgical intern Here are included such procedures as sternal infusion, the use of the Padgett dermatome, the Miller-Abbott tube, dicumarol therapy, and the care of gastric and duodenal fistula.

In the revision especial attention has been given to the antibiotics in wound healing, to thrombophlebitis and phlebothrombosis, to pilonidal sinuses, and to varicose veins. In the chapter on burns the superiority of the nonadherent pressure dressing treatment is stressed.

New material considers, among many subjects added, hemorrhage control with gelatin sponge or oxidized cellulose, early postoperative ambulation, lumbar sympathetic block in thrombophlebitis, the use of plaster casts in burns, placement of neck incisions and prosthetic restoration of amputated fingers.

The book as a whole is unusually inviting and attractive, with generous illustrations and a comprehensive index.

Pierce MacKenzie, M.D.

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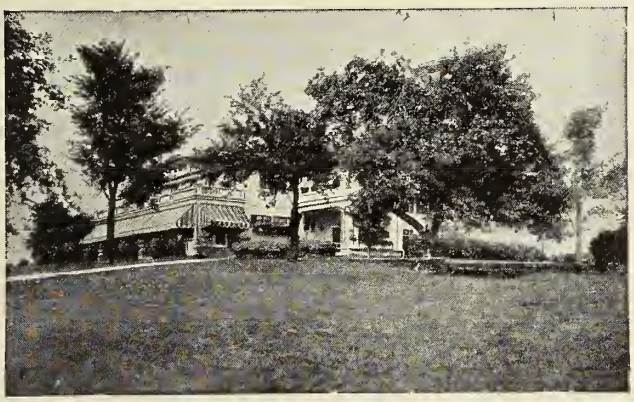
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THE PSYCHOANALYTIC STUDY OF THE CHILD, Volume II. 424 pages. Cloth. Price $7.50. International Universities Press, New York City, 1947.

This book is a collection of papers on psychiatric analyses of behavior disturbances in children, covering such subjects as "The Psychoanalytic Study of Infantile Feeding Disturbances," and "Psychoanalytic Contributions to the Problem of Reading Disabilities."

While quite technical and covering many problems in its scope, it is interesting reading, however of little practical value to any but specialists in Child Psychology and Psychiatry.

R. E. Miller, M.D.

* * *

GIFFORD'S TEXTBOOK OF OPHTHALMOLOGY (Fourth Edition), By Francies H. Adler, M.D., Professor of Ophthalmology, University of Pennsylvania Medical School. 512 pages with 310 illustrations. Cloth. Price $6.00. W. B. Saunders Company, Philadelphia, 1947.

The book is a revised edition of Dr. Sanford Gifford's textbook which was well received in the past by students and general practitioners.

The book is very well organized as to subject matter. The illustrations are excellent.

Chapters four, five, seventeen, nineteen, and twenty should be read not only by the general practitioner but also by anyone interested in ophthalmology.

Doctor Adler is to be commended for the splendid contribution to medical literature by continuing Dr. Gifford's work.

* * *

Nutritional and Vitamin Therapy in General Practice. By Edgar S. Gordon, M.D., Associate Professor of Medicine, University of Wisconsin. 410 pages. Cloth. Price $5.00. The Year Book Publishers, Inc., Chicago, 1947.

This book presents a detailed account of all the known vitamins and interesting comments on carbohydrate, protein and fat in health and disease. The author devotes considerable space to the historical aspect, the chemical nature, the physiology, the optimal daily requirements and the natural sources of all vitamins. The various deficiency diseases with reference to vitamins are also outlined and the specific vitamin factors and dosages of the pure compounds are given.

Much time is spent with accounts of experimental work in animals regarding deficiency states involving various vitamins.

Certain concepts regarding the possible pharmacologic effects of vitamins are set forth. This is particularly interesting since many of the accepted uses of vitamins outside of deficiency disease have but little critical experimental backing.

The author cites the need for objective chemical laboratory methods by which specific vitamin deficiencies may be recognized regardless of the severity of the condition. He points out that the number of mild deficiency states is quite large in comparison with frank deficiency diseases.

In summation, this book is good reading for the general practitioner. I believe it will do much to aid the physician in developing a more rational attitude toward vitamin therapy.

Hugh McAdams, M.D.

SYNOPSIS OF PEDIATRICS. By John Zahorsky, M.D., Professor of Pediatrics, St. Louis University School of Medicine, and Pediatrician-in-Chief to the St. Mary's Group of Hospitals; assisted by T. S. Zahorsky, M.D., Senior Instructor in Pediatrics, St. Louis University School of Medicine, and Assistant Pediatrician to the St. Mary's Group of Hospitals. Fifth Edition. 449 pages, with 158 illustrations and 9 color plates. Cloth. Price $5.50. St. Louis: The C. V. Mosby Company, 1948.

Another revision of this very fine book, "Synopsis of Pediatrics," has been necessitated by the tremendous changes and advances being made in the practice of pediatrics. Much material which the author considered out-moded has been deleted from the former editions and has been replaced in this fifth revised edition with the latest developments in therapy and methods for child care.

The general practitioner, as well as the pediatrician, will find every phase of child care, growth and development, well covered in Dr. Zahorsky's book. It contains 62 chapters and an appendix of drugs and doses. One hundred fifty-eight graphs and illustrations, and 9 color charts add much to the usefulness of the book.

F. R. Nicholas Carter, M.D.

* * *

A MANUAL OF CLINICAL THERAPEUTICS. By Windsor C. Cutting, M.D., Professor of Therapeutics, Stanford University School of Medicine. Second edition. 712 pages, with 30 illustrations. Cloth. Price $5.00. W. B. Saunders Company, Philadelphia, 1948.

This revised second edition of "Manual of Clinical Therapeutics" presents the workable facts of therapeutics briefly and concisely, with many extensions and additions.

The book contains 34 chapters, under which diseases and treatments are classified, as nearly as possible, according to the major differentiating factor or by their anatomic associations. It gives specific medical treatment not only of the diseases most commonly met in general practice, but also of the rarer tropical diseases which are being encountered with increasing frequency. Clinical and pharmacologic descriptions are brief, with emphasis placed upon treatment.

There are ten appendices which contain much useful data, several new diets which will be very helpful in the treatment of certain diseases and obesity; the source and therapeutic use of all drugs are given and the doses are indicated in both the metric system and the approximate equivalent in the apothecaries system, which is in accord with the recent effort by the Council on Pharmacy and Chemistry to promote a wider use of the metric system.

This manual will be found a practical guide for students as well as the practitioner. As a basis for lectures in therapeutics, the subject matter of the book falls into the sequence of courses in pharmacology and medicine as given in most institutions in this country.

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Table of Contents

Our Cover 805

ORIGINAL ARTICLES

Recent Advances in Pharmacology and Therapeutics. R. A. Solomon, M.D., Moderator, A. Ebner Blatt, M.D., James S. Browning, M.D., William M. Dugan, M.D., Paul J. Fouts, M.D., Laura Hare, M.D., Kenneth G. Kohlstaedt, M.D., James D. Peirce, M.D., and Robert E. Westmoreland, M.D., Indianapolis 799
Colic in Infancy. Roland Miller, M.D., LaFayette 806
Mesenteric Adenitis of the Distal Ileum and Appendicitis. Okla W. Sicks, M.D., Indianapolis 807
General Treatment in the More Severe Type of Burns. Arthur V. Cole, M.D., Indiana Harbor 812
The Management and Treatment of Goiter. Goethe Link, M.D., Indianapolis 814

EDITORIALS

Rural Practitioner Needs Clinical Laboratory 816
"Suffereth Long" 818
The November Election 818
"Doctors Scarce" 819
Editorial Notes 819

SPECIAL ARTICLES

President's Page. Cleon A. Nafe, M.D., Indianapolis 820
The Scientific Organization of the Hospital. J. K. Berman, M.D., Indianapolis 821
The Preservation of General Practice. W. D. Gatch, M.D., Indianapolis 825
Advantages and Disadvantages of General Practice in a Large City. John W. Deever, M.D., Indianapolis 827
Advantages and Disadvantages of General Practice in a Rural Area. James B. Maple, M.D., Sullivan 828
Medical Economics—A Personal Problem of Patient and Physician. J. C. Rhea, M.D., Beech Grove 830
Internal Medicine in a Rural Area. Dan L. Urschel, M.D., Mentone 831
A Country Editor Appraises the Country Doctor. Edmund C. Gorrell, Winamac 833
Doctor Sensenich Assumes Presidency of American Medical Association. William M. Cockrum, M.D., Evansville 835
A.M.A. Convention Notes. F. R. N. Carter, M.D., South Bend 837
What Every Medical Officer Should Know About the Atomic Bomb:
VI. Pathologic Anatomy of Radiation Effects of Atomic Explosion 839
VII. Detection of Overexposure to Ionizing Radiation 842
VIII. Public Health Aspects of Atomic Explosion 843
Medical Panorama. Frank B. Ramsey, M.D., Indianapolis 846
What's Going on in Indiana. Ray E. Smith, Indianapolis 850

MISCELLANEOUS

News Notes 852
Deaths 858
Instructional Courses 860
Society Reports:
Indiana State Medical Association:
Executive Committee 863
Committee on Publicity 865
Local Society Reports 868
Woman's Auxiliary 868
Books 870
Indiana State Board of Health—Division of Communicable Disease Control 832
Advertisers' Index 882

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RECENT ADVANCES IN PHARMACOLOGY AND THERAPEUTICS*

R. A. SOLOMON, M.D., *Moderator*

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INDIANAPOLIS

DR. SOLOMON: The past decade has probably witnessed more new developments in pharmacology and therapeutics than any similar period in medical history. This began with the introduction of the sulfonamides into clinical medicine in 1936, followed a few years later by penicillin and again by streptomycin. The entire practice of medicine in its various fields was practically changed overnight by the use of chemotherapy and the antibiotics. But these remedies have been so thoroughly discussed in the literature, their dosage, indications and contraindications, and their toxic effects are so well known, that because of the limited time we shall not discuss them here.

There are, however, many other new pharmacological products, developed in recent years, whose exact status has not yet been so well defined and whose place in therapeutics has not yet been accurately evaluated. Some of these have toxic side reactions and it is often a question as to whether their use is justifiable in view of the possible benefits to be derived from them. In others there is a question of dosage, indications and contraindications, and methods of administration. It is this group of drugs which the members of this panel wish to discuss here, in an attempt to give you their generally accepted status at this time. Because of limited space I shall omit in each case the questions which were submitted to the discussants, but will give you in the following paragraphs a summary of their answers.

AEROSOLS IN THERAPEUTICS

DR. BLATT: Aerosol therapy may be defined as the medicinal administration of fine solid particles or liquid mists as inhalants. For many years asthmatic patients have been given symptomatic relief from epinephrine aerosols but recent advances in antibiotics have made available new uses for this type of therapy. It seems reasonable that the advantages of simple administration and relatively constant rate of absorption, together with a high local concentration of the drug, will make this method valuable in the use of many other types of medicinal agents.

Much complex accessory equipment has been designed, but a suitable nebulizer, a source of compressed air or oxygen, and a rubber tube are all that are necessary. The choice of a nebulizer is important since the aerosol cloud must be com-

* Presented before the postgraduate course for general practitioners at the Indiana University School of Medicine on October 8, 1947, and reproduced by request before the Indiana Board of General Practice on December 3, 1947.

posed of particles of the order of 5 microns or less in diameter in order to penetrate the smaller bronchioles and alveoli. Detergents or wetting agents seem to enhance the action of the antibiotics. Parenteral antibiotics are usually given simultaneously.

The dosage used by Beyson and Grace is 100,000 units of penicillin in 3 cc. of physiological saline, or 3 cc. of 1/1000 aqueous solution of Zephiran every 8 hours for 10 days. Significant blood levels were achieved by this method. Patients treated were those with chronic sinusitus, tracheobronchitis, bronchiectasis, lung abscess, infective bronchitis and infective bronchial asthma. Marked improvement occurred in 75 percent of cases but 25 percent had relapses when the therapy was stopped. In several cases of pulmonary fibrosis, there was marked clinical improvement even though the vital capacity was not increased.

The reports on the use of penicillin aerosols in asthma are quite contradictory but Baruch's experience has been definitely favorable. Henshaw, Feldman, and Pfuetz report definite improvement in pulmonary tuberculosis from the use of streptomycin aerosols. Segal and Ryder used streptomycin aerosols in bronchiectasis due to Friedlander's organisms but streptomycin-resistive strains rapidly appeared and could not be eradicated despite tremendous doses. They feel, however, that it is of value in selected cases of laryngeal and pulmonary tuberculosis.

ANTICOAGULANT THERAPY

Anticoagulant therapy has won an honored place for itself in the prevention and treatment of venous thrombosis and pulmonary embolism. More recently the use of these agents in coronary thrombosis and in cerebral thrombosis is being investigated. The agents used are heparin and dicumarol. The advantages of heparin are prompt effect and relatively easy neutralization by transfusions and protamine, while the disadvantages are high cost and the need for parenteral administration. Dicumarol is inexpensive and is given by mouth. Disadvantages are unpredictable response in many individuals, lack of a reliable method of neutralization, and the time lag in the production of the anticoagulant effect.

Evans and Dee, of the Lahey Clinic, have suggested the following routines for the combined use of heparin and dicumarol. Two hundred mg. of heparin in Pitkin menstruum are injected deeply in the subcutaneous tissues. Dicumarol is given at the same time—either 200 or 300 mg., depending on the patient's body weight. Daily morning determinations of the coagulation time and prothrombin percentage are necessary. A daily maintenance of 50 to 100 mg. of dicumarol is given to keep the prothrombin below 50 percent. No dicumarol is given until the morning prothrombin percentage for that day is known. Heparin is discontinued when the prothrombin drops below 60 percent and the coagulation time determinations can then be discontinued also. If bleeding develops under this regimen, transfusions are used to neutralize heparin, and 60 mg. of vitamin K are given intravenously every six hours until the prothrombin time is normal. This usually takes from 8 to 48 hours.

Since 85 percent of patients with fatal pulmonary emboli give warning signs of low temperature, tachycardia, or a history of previous thromboembolic disease, or have varicose veins, prophylaxis can be accomplished. However, any soreness in the calf or positive Homan's sign, with unexplained fever, should be the signal for the prompt institution of appropriate therapy.

The recent work of Loewe, demonstrating that the "sludge" type of clot can be made to disappear in animal experiments in vivo by the use of heparin, and the use of Pitkin menstruum to facilitate the use of heparin, indicate that in the near future we may see much wider and more general use of anticoagulant therapy in many disease processes.

VITAMIN D IN ARTHRITIS

DR. BROWNING: I think it is rather difficult to answer this question specifically because it is a very controversial one; however, personally, I do not feel there is any place for vitamin D in the treatment of arthritis. Any improvements noted during therapy by this drug are far offset by the toxic effects characterized by anorexia, nausea, vomiting, epigastric distress, bloody diarrhea, headache, drowsiness, lassitude, mental depression, muscular weakness, polyuria, polydipsia, nocturia, hypercalcemia, hyperphosphatemia, azotemia, proteinuria, anemia, leukocytosis, metastatic calcifications, and even death due to uremia. These nearly always occur when the dose is increased above 200,000 units daily. Since the introduction of this drug in the therapy of rheumatoid arthritis, many reports have appeared in the literature, as well as many unpublished reports, together with our own personal experience, which have served to further emphasize its danger if given in large doses over prolonged periods of time. The perpetuation of this form of treatment seems to be fostered chiefly by a group of workers in New York City. They claim no toxicity. This seems strange in view of all of the reports to the contrary in the literature as well as our own experience. In summary, I feel that vitamin D used in the treatment of rheumatoid arthritis in doses of over 10,000 units daily is neither indicated nor justified, since it offers no more to the patient than can be accomplished with a good medical and orthopedic management program, and one does not stand the risk of the dangers of severe intoxication.

GOLD SALTS IN THE ARTHRITIC PATIENT

The employment of gold salts in the treatment of rheumatoid arthritis is founded on two now

generally discredited premises: the first, that gold salts are effective in the treatment of tuberculosis, and that rheumatoid arthritis may be due to tuberculosis. Since the first report more than forty articles on gold therapy have appeared in English, with conspicuously few adverse reports or opinions. Rarely are control series reported. Most of the results are based on subjective improvement. The chronic nature of rheumatoid arthritis and its tendency to spontaneous improvement or exacerbation make difficult the accurate evaluation of any therapeutic agent. This is further complicated by the optimistic nature of many patients who are prone to symptomatic improvement with any therapy administered with a hopeful attitude on the part of the physician. Our results from using this compound in the treatment of forty-seven patients with typical rheumatoid arthritis compare very favorably with those reported recently by Short, Beckman and Bauer, and indicate that this treatment is no more effective than that which can be accomplished by good medical and orthopedic measures and indicate a high incidence of toxic manifestations. With the case as yet unproved for its place as a palliative or adjunct remedy in rheumatoid arthritis, the hazard of this form of therapy should furnish the decisive argument against its general use.

ANTIHISTAMINE DRUGS

DR. DUGAN: Antihistamine drugs are new in the therapeutic field and their development represents a marked advance in medical therapy. They are strong antagonists of histamine. Most investigators believe that the basic lesion in allergic diseases is the allergic wheal or edema of the mucous membrane. This is produced by the release of histamine or histamine-like substance in the tissues. Edema of the mucous membrane of the nose and throat produces the symptoms of hay fever, in bronchial mucosa of asthma, and in the skin of urticaria and angioneurotic edema. Antihistamine drugs do not decrease the production of histamine but they do reduce the local activity and symptoms produced by it.

These drugs are most useful in the treatment of allergic diseases. Hay fever has been treated extensively with them and definite symptomatic improvement has been noted in a majority of cases. Vasomotor rhinitis may also be relieved by antihistamine drugs. Bronchial asthma is generally considered resistant to antihistamine therapy; however, some reports have suggested that the drug may be helpful in early cases where there is considerable edema of the bronchial mucosa. Allergic manifestations of the skin, such as urticaria, contact dermatitis—dermatitis of poison ivy—may be alleviated by these drugs. Food and drug sensitization may be lessened by the administration of antihistamine drugs. Urticarias resulting from food and drug allergies respond well to antihistamines. Angioneurotic edema and serum reactions likewise are benefited by this group of drugs. Generally relief is obtained only while the drug is being given. Treatment of urticaria and allied dermatoses should begin with 25-50 mg., t.i.d., of an antihistamine drug. The amount may be gradually increased up to 300-400 mg. if needed. Since all antihistamine drugs have some antispasmodic tendencies they have been advocated in the treatment of lesions of the G. I. tract in which there is associated spasm.

A number of antihistamine drugs are available for clinical use. The first to be used in this country was benadryl. Pyribenzamine was subsequently introduced. Since the appearance of these two compounds many others have appeared. Histadyl, recently introduced, has proved to be of value.

The dose of antihistamine drugs varies with the disease under treatment and the susceptibility, size and age of the patient. Generally 25-50 mg., 3 to 4 times daily, is an average dose. Children may require less and adults more. The dose should be adjusted for each patient. The larger the dose the higher the incidence of toxic manifestations.

Toxicity is manifested principally by drowsiness, dizziness, weakness and dryness of the mouth. Others complain of being "nervous" and "jittery." Coordination in some is impaired. Toxicity to some degree is present in most patients but in only approximately 10 to 20 percent of the patients are symptoms sufficiently marked to require discontinuing the drug. As drowsiness is a marked symptom in some patients precautions should be taken to prevent patients on antihistamine drugs from driving automobiles, and working with machinery. Drowsiness may be more marked soon after drug therapy is instituted and gradually lessen with continued use.

A cure or lasting improvement is not to be expected from the use of these drugs. Generally they exert only palliative action. Special methods of management of allergic disease, such as elimination and desensitization should not be abandoned, for a combination of this method of management with the use of antihistamine drugs will usually afford a higher degree of symptomatic relief.

FOLIC ACID

DR. FOUTS: Synthetic folic acid is a component of the vitamin B complex which, when given by mouth in daily doses of 10 to 40 mg., will usually maintain the blood of patients having pernicious anemia, sprue and the other nutritional macrocytic anemias, at normal levels. However, it will not prevent the development or advancement of the neurological involvement occurring in pernicious anemia. The increases in neurological involvement often have been very spectacular and

much more rapid than that seen when the patient receives no therapy at all. An occasional patient having pernicious anemia is unable to maintain a normal count on the usual dose of folic acid. Therefore, liver extract is still the treatment of choice in pernicious anemia. In the nutritional macrocytic anemias, such as sprue, folic acid may be more effective than liver extract. It, however, is effective only in those macrocytic anemias which have megaloblastic bone marrow. Folic acid is of no value in the treatment of iron deficiency anemia, leukemia or aplastic anemia.

RUTIN

Rutin is a preparation obtained from vitamin P which has been recommended for the treatment of conditions showing an increased capillary fragility. It is still prescribed in these conditions but as yet it has not been proved that rutin is definitely of any value.

THE NITROGEN MUSTARDS

A few of the many nitrogen mustards developed during the war have been used in the treatment of cancer and the malignant lymphomas. The most satisfactory responses have occurred in patients having Hodgkin's disease. The response, however, is only short-lived and never as complete as that following the first course of x-ray therapy. Patients who have developed resistance to x-ray may respond to nitrogen mustard and others may again respond to x-ray following a course of nitrogen mustard. Aplastic anemia, thrombocytopenia or neutropenia may follow nitrogen mustard therapy.

THIOURACIL AND 6-N-PROPYLTHIOURACIL (PROPACIL)

DR. HARE: With the advent of thiouracil, four years ago, it was hoped that an ideal drug to be used in the treatment of hyperthyroidism had been found. Unfortunately, such is not the case—it is far too toxic a drug to be used without constant vigilance and frequent laboratory checks.

Concerning the point of action of the thiouracil drugs: Iodine exists in the blood in the form of iodide and its conversion to free iodine by an oxidase reaction must take place before it can be utilized in the formation of thyroxin. It is now believed that this is the site of action of the thiouracils, namely, the inhibition of this oxidase reaction, which in turn prevents the formation of the thyroid hormone. The gland becomes hyperplastic and the amount of colloid is greatly reduced.

The usual effective dose of thiouracil is 0.2 gm. t.i.d., with reduction, after the desired effect is achieved, to a maintenance of 0.1 or 0.2 gm. daily. Although the results obtained in many cases of severe toxicity have been gratifying, the potential toxic factor is too great to warrant continuing its use. Aside from relatively mild manifestations of toxicity, such as fever, rash, lymphadenopathy and arthritis, leukopenia progressing to agranulocytosis has been reported in several cases with fatal termination. Its unpredictability makes it the more dangerous as this complication may occur without warning after weeks or months of apparently safe and effective therapy.

Therefore, I would stress the superiority of propylthiouracil, as it is equally as effective and much the safer of the two drugs. It is, roughly, three times more potent than thiouracil by equivalent dosage. Two hundred to 300 mg. daily, in divided doses, along with an iodine solution, is adequate for most patients. Maintenance dosage of 50 to 100 mg. may be sufficient, but a W.B.C. must be repeated at 10-day intervals and the patient carefully watched throughout the entire period. A few cases of leukopenia with relative granulocytopenia have been reported. Whether propylthiouracil should be used in an attempt to bring about a permanent remission or simply as a preoperative measure is a questionable point. Best chances for a sustained remission are apparently obtained after continuing the drug for ten months. It is said that as a general rule the diffuse, exophthalmic type of toxic goiter responds better than the nodular type. In round figures, about 59 to 60 percent of the cases can expect a sustained remission. It is still the general consensus that surgery in the form of a subtotal thyroidectomy is the treatment of choice. Exceptions must be conceded in cases of postoperative recurrences and in those who either refuse surgery or are unable to tolerate it. The fact remains, however, that as long as there is a strong element of potential danger in the drug chosen, it falls short of the ideal and search will continue until a safer and more effective preparation is discovered.

METHADON AS A MORPHINE SUBSTITUTE

DR. KOHLSTAEDT: Methadon is the generic name selected by the Council on Pharmacy and Chemistry of the A.M.A. for a synthetic analgesic that was obtained from Germany at the end of World War II. It has been given the proprietary name of 'Dolophine' (Methadon, Lilly). We have had an opportunity to observe its effect on various types of pain in several hundred patients at the Indianapolis General Hospital.

Dr. C. C. Scott, of the Pharmacology Department of Eli Lilly and Company, demonstrated that 2.5 mg. of methadon given orally to man elevated the pain threshold as determined by the Wolff-Hardy-Goodell technique. In our laboratory at the Indianapolis General Hospital we found that methadon depressed respiration. We also observed that 10 mg. of methadon administered subcutaneously was as effective for the control of pain as 15 mg. of morphine given by the same route. An important characteristic of methadon is that it causes less euphoria than morphine.

Methadon is a morhpine substitute, and because it satisfies the morphine addict, the drug has been declared a narcotic. Its use is subject to all the regulations of the Harrison Narcotic Law. The fact that methadon does not produce as much euphoria as a dose of morphine of equal analgetic potency is an important advantage. Methadon should prove especially useful in controlling pain due to a chronic disease. In the treatment of a patient whose personality is such that he could easily become addicted to morphine, it would be safer to use methadon.

This synthetic analgesic may be used in the treatment of morphine addiction. Methadon is substituted for morphine and then the former is withdrawn. This eliminates the severe reaction that may ensue after the administration of large doses of morphine is halted. I should like to emphasize that care must be taken lest we simply convert a morphine addict to a methadon addict.

Methadon alleviates pain during the postoperative period. It is not satisfactory as a preanesthetic when a general inhalation anesthetic is to be given, because methadon does not cause sufficient euphoria to allay apprehension. It has controlled urinary bladder spasm, but is less effective for control of pain associated with dyskinesia of the biliary system or urinary tract.

Methadon has great possibilities in the field of analgesia. Its discovery has made the world independent of opium. This is important today because the supply of opium is limited and uncertain.

BAL

The discovery that BAL was an effective antidote for arsenic is one of the most important therapeutic advances to be derived from research intended to solve a problem in World War II. BAL is 2,3-dimercaptopropanol; it is a di-thiol compound. The term "BAL" is an abbreviation for British Anti-Lewisite. It was developed as a protective agent against the local effect of war gases.

It has long been known that the toxic effects of arsenic are the result of a combination of this substance with tissue protein. This union of arsenic and body tissue blocked an enzyme system, and thus disrupted cellular metabolism. Chemists had known that the di-thiol compounds had a great affinity for arsenic and that this combination was a very stable compound. However, no one realized that the affinity of arsenic for the dimercaptopropanol was far greater than it was for tissue protein. Actually arsenic can be extracted from living tissue by BAL. The effectiveness of this compound was discovered by clinical trial in England and America. Experiments were performed which demonstrated that BAL combined with arsenic to form a harmless combination.

The results of preliminary tests have been confirmed by more extensive studies at Johns Hopkins Medical School. Eagle[1] reported that in a series of 88 patients with arsenical dermatitis, 80 percent responded to treatment with BAL in 13 days. Of 55 patients with toxic encephalitis, 44 made a complete recovery.

BAL has also been used in the treatment of mercury poisoning. Luetscher reported at the meeting of the A.M.A. in Atlantic City in 1947, that at the Johns Hopkins Hospital 59 out of 61 patients with bichloride of mercury poisoning who received BAL recovered. We administered BAL to one patient whom we were reasonably sure had ingested at least 1 gram of bichloride of mercury. Recovery was apparently complete; no evidence of renal impairment could be detected at the time of her release from the hospital.

It is important for all physicians to know that BAL is now obtainable through regular channels of the drug trade. It should be in every doctor's emergency kit.

BAL is dissolved in a solution of peanut oil and benzyl benzoate. It is given intramuscularly. The initial dose should be 5 mg. per kg., and 2.5 mg. per kg. every 4 hours for several days. Then the latter amount should be given twice each day for at least an additional 10 days. Some of the failures in the early studies were undoubtedly due to insufficient dosage and failure to continue administration of drug for a sufficient length of time.

Unpleasant side effects have been noted, but they have not been serious. Untoward symptoms may be controlled by ephedrine sulfate.

I would like to mention that BAL may also be of value in the treatment of poisoning due to gold salts.[2] BAL should not be used for treatment of metallic poisoning other than arsenic, mercury, or gold. In some instances metal and BAL may combine to form a compound which is more toxic than the metal itself. An example is cadmium. This substance causes a mild nephrosis, but when BAL is given the combination of substances produces extensive renal damage.

You should all become familiar with the use of BAL, because its administration may be a life-saving measure. To obtain satisfactory results it must be given within six hours after the ingestion of arsenic or mercury.

THIOCYANATE THERAPY FOR ESSENTIAL HYPERTENSION

DR. PEIRCE: The use of some form of the thiocyanate ion is not a new therapeutic measure. Claude Bernard first examined it pharmacologically in 1857. Clinical application of the drug was first suggested by Pauli (1903) who noted its ability to lower blood pressure. It was not until 1936, when Barker developed a suitable blood concen-

[1] Am. J. Syph., 30:420, 1946.
[2] J. A. M. A., 133:749 and 752, 1947.

tration method, that thiocyanate therapy became popular. The drug is not without toxicity, so that frequent blood concentration determinations are imperative.

The mechanism by which the hypotensive effect is achieved is not known. Some believe that thiocyanate possesses a sedative action and that the lowering of blood pressure in the hypertensive patient is secondary to the relief of symptoms.

A single dose of thiocyanate is excreted slowly and in variable amounts by the kidneys over a period of three to four days, so that urinary concentration is not an accurate means for dosage determination. The therapy is contraindicated, and fatalities have been reported when used in patients with poor renal function. Most investigators familiar with this drug feel that such toxic episodes need not occur if the role of renal function is appreciated and frequent blood determinations are obtained.

The primary indication for the use of thiocyanate is for the relief of the headache associated with hypertension. Allied symptoms, such as insomnia and emotional instability, may be improved. The headache of migraine has been alleviated, and some feel it is the therapy of choice. The blood pressure lowering qualities of thiocyanate are of secondary consideration, and individual reports vary from 25 percent to 80 percent satisfactory response. The so-called neurogenic hypertensive patient appears to respond the best.

The average dosage of thiocyanate is between 6 and 9 grains (0.4 to 0.6 gm.) daily, in divided doses. Early in the course of therapy weekly thiocyanate blood determinations must be made. The level of the blood pressure should never be the criterion for thiocyanate dosage. The serum thiocyanate concentration should be maintained between 8 and 12 mg. percent, but this concentration should not be reached too rapidly. One should appreciate that this is an average range for the best therapeutic management, but not a few patients will achieve excellent results at lower concentrations. Barring evidence of toxicity, the therapy should be continued for at least 3 months before it is considered a failure.

Frequently the side reactions of fatigue, somnolence, and mental retardation occur with the too rapid administration of the drug. These are not always indications for the prompt discontinuance of the therapy; if the blood thiocyanate level is within the therapeutic range, the dosage may be lowered. Frequently the symptoms do not recur when the drug is gradually increased the second time. The delayed reactions associated with thiocyanate therapy are:

1) A diffuse macular rash appearing on the face and arms and legs, attended by some burning and itching. This is rather dramatically relieved by the use of one of the antihistaminics and cessation of the drug. Thiocyanate may be given again in some cases without a recurrence and some patients may continue therapy along with the antihistaminic.

2) Thyroid enlargement sometimes occurs, but it can be controlled with the use of ½ to 1 gr. daily doses of thyroid. The thiocyanate should be stopped.

3) Bone pain and painful feet have been reported as a side reaction. The symptoms disappear with cessation of the drug, and in some cases reappeared on reinstitution of therapy at a later date.

4) Angina and thrombophlebitis have been reported as evidences of toxicity, but some investigators feel that the relationship is fortuitous rather than causal.

ANTIMALARIAL DRUGS

DR. WESTMORLAND: The recent war enormously increased our knowledge of antimalarial therapy. Before 1942 little was known of the pharmacology of quinacrine (atabrine), hence therapy with this preparation was entirely empirical. Development of methods for studying the pharmacology of the drug revolutionized treatment of malaria and produced a rational method of therapy. Then it was possible to demonstrate that quinacrine was superior to quinine. Quinacrine was shown to terminate clinical malaria abruptly and would cure falciparum malaria when administered for only two days.

The Board for the Coordination of Malarial Studies examined 14,000 compounds for antimalarial activity. Of these, 80 showed enough promise to warrant clinical investigation, from which has come the most recent drug in clinical practice, chloroquine (SN 7618).

Dubbed "a colorless atabrine," chloroquine appears superior to quinacrine. It is absorbed nearly completely from the gastro-intestinal tract. Considerable amounts are deposited in organs and tissues, with concentration 200 to 500 times that in plasma. It is largely metabolized, less than 20 percent being excreted unchanged. Toxicity of chloroquine is negligible, even less than that of atabrine. Mild, transient headache, visual disturbances, pruritus, and gastro-intestinal complaints have occurred occasionally. No serious symptoms and no impairment of health were observed in chronic toxicity studies. It does not discolor the skin. It is highly effective in suppressing vivax malaria and in terminating acute attacks, significantly lengthening the interval between treatment and relapse beyond that observed with quinacrine or quinine. In falciparum malaria, it effects complete cure. Antimalarial activity of chloroquine against well-standardized strains of vivax and falciparum has been shown to be three times that of quinacrine.

At our hospital we consider chloroquine the treatment of choice for malaria. Dosage schedule:

1) To terminate acute attacks: 0.3 grams twice on the initial day at four-hour intervals, and once on each of two successive days.
2) For suppression: 0.3 grams once weekly.

Mention should be made of two other recent advances in antimalarial therapy:

1) Revival of use of the toxic drug plasmochin in the form of the naphtholate (pamaquin) in an attempt to cure repeatedly relapsing vivax malaria.
2) Experimental use of a member of the 8-aminoquinoline group, SN 13276, which may actually be curative in vivax malaria.

PARA-AMINOBENZOIC ACID

Recently, para-aminobenzoic acid has been demonstrated to be relatively specific in the rickettsial diseases (typhus, Rocky Mountain spotted fever, and scrub typhus), if administered during the first week following onset. When the drug is properly used, the results consist of:

1) A practical guarantee that fatalities can be eliminated.
2) Rapid decrease and disappearance of toxic manifestations.
3) Reduction in complications (bronchitis, pneumonitis, myocarditis, and hemorrhage).
4) Shortening of convalescence.

To maintain a desired plasma level of 30 to 60 milligrams per 100 cc., an initial dose of 8 grams is followed by 3 grams every two hours. The drug is administered orally in powder form, partly neutralized by sodium bicarbonate to lessen gastric acidity (10 cc. 5 percent soda bicarbonate per gram of para-aminobenzoic acid). Possible toxic effects are acidosis, leukopenia, abdominal distension, delirium.

CLOSING REMARKS

DR. SOLOMON: In closing, we wish to emphasize the fact that the use of many of these drugs is still a controversial question. Many valuable remedies are potentially dangerous, and their use is permissible only if one is willing to observe the patient both clinically and at times by laboratory control. One must be alert to the possible toxic effects of any drug and be ready to stop it at the first appearance of such. On the other hand, a life saving remedy ought not be withheld from a seriously ill patient because of potential toxicity. It would seem that in each case the danger of the patient's illness must be weighed against the danger of the remedy to be used. It might be the part of wisdom to follow the famous adage of Alexander Pope: "Be not the first by whom the new are tried, nor yet the last to lay the old aside."

OUR COVER

Our interesting cover was made possible through the courtesy of Abbott Laboratories, who supplied the original lithograph by the late Grant Wood. This is the last work of this outstanding artist, who finished signing the lithographs in his hospital bed just two days before his death. The hands in the illustration are those of his own physician, of whom he said, "Let this be a small tribute to the skill and artistry of the Family Doctor from one who for many years has known him well—sometimes in his professional role, occasionally as a critic, always as a friend."

COLIC IN INFANCY*

Roland Miller, M.D.

LAFAYETTE

INFANTILE colic is a difficulty commonly encountered in caring for newborn infants through the first three months of life. The condition, unchanged by the years, remains a troublesome entity that concerns not only the patient, but the father, mother, and the doctor, and it is a fortunate doctor who can satisfy the parents by relieving the baby.

Infantile colic is always related to the gastrointestinal tract and is due chiefly to overdistension and forcible peristalsis. It has been well compared with gallstone or renal colic, labor pains, and gas pains following surgery on the intestinal tract, because an infant with severe colic appears to be in as much discomfort as an adult with any of these conditions.

There are many degrees of severity and probably several minor differences in cause but it is thought that three factors most frequently lead to infantile colic. These are hunger and underfeeding; overfeeding with increased fermentation; and the third, enterospasm or conditions possibly caused by autonomic nervous system imbalance. A baby who is hungry will suck on anything he can get in his mouth, cries most of the time, and in doing so, swallows large amounts of air. This passes from his stomach into the intestine and results in distension of loops of bowel, with kinking and formation of a temporary complete obstruction. Overfeeding as a cause of colic is not very frequent but it is thought to result occasionally in increased fermentation with trapping of small amounts of gas, leading to the same condition. The third type, that of enterospasm or autonomic imbalance, is restricted to a particular class of individuals. These infants are as a general rule chronically hypertonic and have colic most of the time. They are tense, wakeful and irritable, and spit up food quite frequently. One of the chief complaints is that the formula doesn't agree with them. They are more or less constantly distended and may have constipation or low-grade diarrhea. They are referred to as hypertonic infants, or in the literature it is spoken of as a neuropathic diathesis. These infants are found most frequently, it is thought, in homes where there is quite a bit of emotional tension and they fall into the same pattern. They have increased peristalsis with visible waves on the abdominal wall.

Colic in general occurs only during the first three months, rarely continuing to six months. Brennaman states that infants are more underdone than any other mammal and, because of this, their food requirements so nearly approach their food tolerance that mechanical and digestive upsets are easily induced. One characteristic of colic is that it rarely occurs in the morning, nearly always in the evening, and it very seldom happens in the hospital, being restricted mostly to infants in the home. The acute or severe attack of colic is manifested by extremely sharp, intense pains that are referred to the abdomen. It is not merely discomforting, it is an agonizing pain. The infant screams as long as this pain lasts, becomes diffused all over, at times even appearing cyanotic. He draws his legs up on his abdomen and shows evidence of acute, extreme pain. At this time the abdomen is rigid and distended, then when the pain passes, the baby continues to sob for a short time, until another pain occurs. The attack begins suddenly and after progressing for a period of time, will end as dramatically. Quite frequently the infant will terminate an attack by passing a large amount of flatus or by belching.

The treatment is both symptomatic and prophylactic. In the acute attack treatment is necessary because of the extreme discomfort. The simplest method is to do nothing more than "burp" the baby. If it is in the stomach that will give relief but usually the entrapped gas is in the lower bowel. A rectal tube may do some good, but the best method of treating it is by a small, warm, soapsuds enema of three or four ounces. This allows the infant to have a bowel movement and to pass with it large amounts of flatus, and will usually terminate the attack. External heat has been recommended; this is given best by laying the baby on his abdomen on a well-protected hot water bottle. The heat tends to relax the spasm, and the weight of the baby on his distended intestines will allow him to pass flatus. Sedation sometimes is necessary, especially if the baby has a tendency to colic and it has recurred several times. It is good for the baby, as well as for the mother and the entire family. Carminatives have been recommended, such as peppermint in water or a sodamint tablet dissolved in a tablespoonful of warm water. These are the palliative remedies for the acute attack when they are actually having pains but we should go on to prophylactic remedies; determine the cause and treat it. This should be centered chiefly around the mechanics of feeding.

One of the most common errors in treating colic is to assume that the breast milk isn't adequate.

* Read at the St. Elizabeth Hospital Postgraduate Course in LaFayette, November, 1947

It is frequently assumed that if the baby is having trouble on the breast he should be on a bottle. If he is already on a formula, then the formula isn't any good, so a series of formula changes is started. Usually in changing the formula we try to cut down on some offending substance; reduce the sugar or take out a little of the cream; in fact, any change, with a hope for results. These assumptions are in error. Altogether it means that a baby who is already underfed is being more underfed by the changes in the formula and a vicious cycle of less food and more colic is started. Most men believe that the quality of breast milk or the character of the formula rarely, if ever, causes colic. They agree that underfeeding is one of the main causes, another is to have the holes in the nipple too large, allowing the infant to swallow excessive air with the formula; and a third factor is inadequate belching. Some infants have to be belched halfway through their feeding or more frequently. Stop while feeding them, belch them, and then continue with the feeding. If they are underfed, attempts at increasing the formula sometimes cause more severe colic for a short time, until more adequate nutrition is obtained, before the colic will disappear. If these measures fail, sometimes a diet a little less rich in fats, pernaps a one-half skim milk formula, may be necessary. It may give some relief, but at that the caloric intake of the baby should be taken into account and enough calories given. Those infants that are spoken of as hypertonic infants quite frequently have hypermotility of the intestinal tract, sometimes benefiting from more frequent feedings, such as every three hours instead of every four; but feeding at less than three-hour intervals should not be encouraged. They should have at least a three-hour feeding schedule. Elixir of phenobarbital or some other mild sedative in these babies is good because it keeps them on a less tense basis. From two cc. to a dram every four hours, or fifteen minutes before feeding, is the best tolerated dose. It should be adjusted for the individual baby, however. Such small doses are well tolerated, give excellent results and may be withdrawn at any time without trouble, if the basic condition is corrected.

MESENTERIC ADENITIS OF THE DISTAL ILEUM AND APPENDICITIS

Okla W. Sicks, M.D.

INDIANAPOLIS

MANY children and young adults operated for appendicitis have an accompanying marked adenitis in the mesentery of the distal ileum. These cases are encountered by all medical men, but more especially is this true in the field of general practice, pediatrics and surgery. Considering its prevalence and its increased recognition, the condition has aroused only scattered comment and discussion. Possible causative factors of this syndrome, the incidence, the symptoms and the results following appendectomy will be given consideration.

REVIEW OF LITERATURE

A review of the literature on this subject is very interesting. There are many and varied ideas concerning this disease condition.

Speer,[1] 1929, stated that the association of mesenteric adenitis and appendicitis is one of great importance, both from the diagnostic and etiological point of view. He thought that the lymphadenoid apparatus of the intestinal wall—the Peyer's patches—plays a role in mesenteric adenitis, similar to that which tonsils do in the cervical variety of lymphadenitis. Appendectomy is advocated by him—to remove a possible cause of infection and also for the beneficial effect that laparotomy may have on the condition—as in tuberculous peritonitis.

Muehsam,[2] 1945, called the condition "Ileocecal Glandular Disease."

Segar and Rosenak,[3] 1935, note that for many years physicians regarded infections of the mesenteric lymph nodes as always being of tuberculous origin. They associate the abdominal symptoms in children with upper respiratory tract infections and suggest that the source of infection is swallowed secretion from the nose and throat. This is pointed out as the method of infection by bovine tuberculosis or pulmonary tuberculosis in tuberculous gland of the mesentery. They believe that it is safe to conclude that mesenteric adenitis does not often complicate appendicitis and that this organ has nothing to do with the site of mesenteric lymphadenitis in the ileocecal region. Segar and Rosenak go on to say that the impossibility of diagnostically eliminating appendicitis in most cases of mesenteric lymphadenitis without laparotomy would appear to make operation imperative in practically every instance.

[1] Speer, John, Penn. Medical Journal, January, 1929.

[2] Muehsam, E., Am. J. Digest. Dis., 12:208-209, June, 1945.

[3] Segar, L. and Rosenak, B., Am. J. Digest. Dis., March, 1935.

The confusion of the differential diagnosis makes the responsibility of not operating too great for any surgeon to assume. They advise against removal of glands because of danger of producing peritonitis.

Wilensky,[4] 1941, points out that the lymphatics of the appendix are associated with those of the cecum and usually follow the branches of the appendiceal artery. Then he contends that on anatomic grounds no swelling of the mesenteric lymph nodes of the ileum could occur with infection in the appendix. He states that a diet deficient in vitamin A greatly increased the number of organisms in the lymphoid tissue—gram-positive bacteria—especially was this the case in the lymphoid tissue of the appendix in rabbits.

King,[5] 1944, discussed possible sources of the pain associated with glandular enlargement in the mesentery of the ileum. The nerve supply of this area is by means of the superior mesentery plexus which also supplies the pancreas, other parts of the small bowel, the ascending and transverse colon. It may be due to such nerve supply that pain referred from the adenitis of the mesentery of the ileum would account for such varied areas of abdominal pain.

He goes on to state that in acute mesenteric adenitis it appears that the majority of cases are the result of absorption from the lymphatics of the ileum of bacteria, their toxins and other decomposition products. Spasm of the ileum is thought to be the cause of the acute pain, rather than swelling or tightness of the peritoneal covering over the enlarged glands.

Aird,[6] 1945, gives the following ratio of patients admitted to his service in Edinburgh Children's Hospital in one year:

37 patients—nonspecific adenitis
4 patients—abdominal tuberculosis
83 patients—acute appendicitis—or 30 percent nonspecific adenitis.

He noted that the pain is a general abdominal colic with freedom from pain between spasms of colic. He observes that the patient is happier and livelier between spasms than any patient who harbors an inflamed appendix. The patient moves during the attack of pain, which would be unusual in acute appendicitis. The writer associated many of these attacks with a recent sore throat or upper respiratory infection.

Aird suggested that there might be a relationship between mesenteric adenitis and the acute regional ileitis of Crohn. He states that regional ileitis presents the same glandular enlargement as that seen in nonspecific mesenteric adenitis.

Concerning the pain of this disease, Hiss found that the lymph nodes followed the course of the arteries and were located among the nerve fibers—any stretch or pull on the mesentery caused pain.

Freeman,[7] 1923, mentioned that the violent colicky spasms of the bowel were probably due to irritation of the mesenteric nerves which surround the glands.

Tilley,[8] 1942, in a series of 69 cases, stated that no evidence of any of the specific causes of mesenteric adenitis were found at operation, but that removal of the appendix was followed by cure in the majority of cases; only two in the group had definite recurrence of pain.

Coleman,[9] 1946, remarked that the mortality of appendicitis was the mortality of delay—often brought about by the uncertainty of diagnosis. Many children have periodic attacks of abdominal pain and right lower quadrant tenderness which quickly subside, but often recur after a mild cold, sore throat or bowel upset. If the appendix is removed, it will be normal grossly and microscopically, and yet in a surprising number of cases the recurring symptoms disappear. The general impression in mesenteric lymphadenitis is one of suspected appendicitis but with symptoms being too mild to let the examiner feel that the appendix is really at fault.

Coleman stated that in the spring months, when respiratory infections are common, cases of mesenteric lymphadenitis have run as high as 35 percent in patients in whom appendicitis was the original diagnosis.

Gatch,[10] 1936, wrote that the cause of nontuberculous mesenteric lymphadenitis is unknown. He now believes that probably the most common cause is a virus infection.

CAUSATIVE FACTORS

Several possible causative factors or pathological conditions which may bring on the glandular enlargement and the symptoms of appendiceal irritation have been given consideration.

1. Stasis of fecal flow proximal to the ileocecal valve could cause increased bacterial content, with possible increase in virulence. This may be the source of bowel wall invasion of organisms with inflammation and its resulting glandular enlargement.

2. There could be glandular enlargement in the mesentery of the distal ileum from the absorption of the toxins produced by the increased bacteria at this point where the fecal flow is at low ebb.

It has been noted that the walls of the distal ileum are oftentimes more congested and thicker in cases where the underlying glands are enlarged.

3. The increased bacterial count, with possible increased virulence in the bowel content of the distal ileum, could be a source of infection in the

[4] Wilensky, A. O., Am. J. Surg., January, 1941.
[5] King, W. E., Am. J. Surg., April, 1944.
[6] Aird, Jan, British Med. J., November, 1945.
[7] Freeman, L., Surg., Gyn. and Ob., 37:149-151, 1923.
[8] Tilley, J. H., Am. J. Surg., September, 1942.
[9] Coleman, E. P., Am. J. Surg., December, 1946.
[10] Gatch, W. D., in Christopher's Surgery.

appendix, either by direct spread in the tissues or by entry into the lumen of the appendix by the fecal stream passing through the ileocecal valve. This could give rise to absorption and enlargement of the neighboring lymph glands. It is not uncommon to find enlarged glands in the mesentery of the appendix as well as the mesentery of the ileum.

4. Upper respiratory infections in young patients have been associated with the symptoms indicative of mesenteric glandular enlargement. A virus infection has been mentioned as a possibility.

The association of upper respiratory inflammation and adenitis of the mesentery has not been noticeable in the cases encountered in the writer's series.

5. Microscopic examination of these glands for the most part reveals no organisms, but suppuration of the glands has been observed and widespread peritonitis has resulted from their removal, showing that infection does exist.

From this study of the literature, different schools of thought seem to have developed concerning the etiology of the mesenteric adenitis of the distal ileum.

First, there are those who believe that the appendix is the portal of entry for the infection.

Second, those who believe that the appendix plays no part in the glandular change.

SYMPTOMS AND DIFFERENTIAL DIAGNOSIS

In nonspecific mesenteric adenitis:

1. Child is finicky or more spasmodic in eating habits than in appendicitis.
2. Oftentimes not a robust child—pale and undernourished—may be unable to gain weight.
3. The child does not play regularly—lies around the house—not a leader.
4. There are colic pains—sharp and spasmodic—with no pain between, as in appendicitis.
5. The child rolls and kicks with attack, while with appendicitis he is usually quiet.
6. Tenderness is higher and more medial.
7. Muscles around umbilicus, when rigid, tend to relax under steady pressure. Will not do this in most appendicitis.
8. Rebound tenderness is usually absent.
9. There is a history of typical recurrent attacks.

In tuberculous mesenteric adenitis:

1. Leukocytosis is absent.
2. Between the recurrent attacks the pain is more constant.
3. The abdominal wall is relaxed.
4. Tuberculosis may be present in the glands of the neck and in the lungs.
5. At operation tubercles may be seen on the peritoneum.
6. Tuberculosis of glands is rare since pasteurization of milk.

CASE HISTORIES

The following cases were selected at random, without special attention to pathology or after results:

P.M. Boy, age 6.

Complaint on admission: Acute pain in the abdomen around navel and shifting to the right lower quadrant—of one day's duration. Patient had had occasional attacks of abdominal pain in the past three years. During some of these attacks he would vomit fourteen to eighteen times. His appetite had been poor and his disposition not good for the past six months. His weight had decreased and he had suffered from colds and sore throat.

On examination, the abdomen was tender, especially in the right lower quadrant. The temperature was 100.4 degrees, with a pulse of 110. The white blood count was 18,300 with 86 percent polymorphonuclears.

The operative report was appendectomy. The appendix was somewhat thickened and injected. There were numerous large glands in the mesentery of the distal ileum. No Meckel's diverticulum was seen. Pathology report: Appendix—no definite inflammatory changes found.

The hospital convalescence was normal.

Eight months after operation the mother states that the patient's appetite was excellent for a few months but that now he does not eat much at some meals. He plays constantly, has gained weight, has a better color; cheeks now rosy where formerly they were pale. The abdominal pains have not recurred.

G.M. Girl, age 10.

Complaint on admission: Pain in right abdomen, nausea, constipation. This pain started a week ago and has been continuous. The patient had been in bed until the day before coming to the hospital, when she went to school and was sent home. Otherwise, her past history is not important.

On admittance, the abdomen was rigid, with tenderness in the right lower quadrant. The temperature was 100 degrees, with a pulse of 106. The white blood count was 8,600, with 64 percent polymorphonuclears.

Operative report was appendectomy—appendix mildly inflamed at the tip. There was a very marked mesenteric lymphadenitis in the distal ileum, some of the lymph nodes measuring 2 cm. in diameter. Pathology report: Appendix—no inflammatory changes present. The patient made a normal postoperative recovery.

One year after operation the patient's mother reports the child as being in good health, with a good appetite. She runs and plays much of the time. There is an occasional pain high in the right abdomen.

L.W. Boy, age 5.

Complaint on admission: Abdominal pain, tenderness in right lower quadrant, and nausea. Six months previously the patient had an attack of left abdominal pain which caused him to draw up the legs. The urine at that time showed red blood cells. He was treated with vitamin A, with cessation of attacks until two days before admission, when the abdominal pain returned in the region of the umbilicus. Nausea and vomiting followed, with pain becoming more severe in the right lower quadrant. The appetite has been quite variable.

On admittance, the patient was very tender in the right lower quadrant. The temperature was 99.4 degrees, rectally, with a pulse of 135. The white blood count was 7,150 with 47 percent polymorphonuclears.

The surgical report was appendectomy—appendix distended, reddened and inflamed. There was a large gland in the meso-appendix and numerous clusters of large glands in the mesentery of the distal ileum. No Meckel's diverticulum was seen. The pathology report was appendicitis, mild.

The hospital convalescence was uneventful.

Seven months after operation the mother states that the patient has had no recurrence of the abdominal pains, is feeling fine, is gaining weight, has a better color and plays most of the time. The appetite has not changed.

L.W. Girl, age 11.

Complaint on admission: Sudden severe pain in abdomen, which doubled her up; no nausea or vomiting. She has had four such attacks in the past three months. There had been some pain every day and the patient had been excused from gymnastics at school on account of the abdominal pain. The patient had irregular, spasmodic eating habits.

On examination, there was splinting of the abdominal muscles, with tenderness in McBurney's area. The temperature was 99.0 degrees, with a pulse of 82. The white blood count was 4,200 with 55 percent polymorphonuclears.

The operative report was appendectomy with an appendix that was thickened and injected in the proximal two-thirds. There were large glands in the mesentery of the distal ileum. No Meckel's diverticulum was seen. The pathologist reports an appendix which appears about normal.

The postoperative course was uneventful.

Seven months after operation, the mother says that the patient has gained twenty-three pounds in weight, has a good appetite, plays harder, and has occasional abdominal pains after eating.

D.C. Boy, age 16.

Complaint on admission: Pain in the right lower quadrant for several weeks. The first attack had been four years previously, with exacerbations and remissions of pain. There had been a loss of fifty-three pounds in the past five months. He was not nauseated, did not vomit, did not want to eat, and has had normal bowel habits.

On examination, there was only vague distress in the mid-abdomen on pressure. No rigidity or rebound pain or tenderness was present in the right lower quadrant. The temperature and pulse were normal. The white blood count was 7,200, with 72 percent polymorphonuclears.

The surgical report was appendectomy with chronic, thickened appendix. The glands in the mesentery of the distal ileum were numerous and quite enlarged. The pathology report was chronic appendicitis.

The postoperative course was uneventful.

Two years after operation, the family doctor reports that the boy is eating normally and has regained weight. The abdominal distress has not recurred.

W.S. Boy, age 8.

Complaint on admission: Abdominal pains, not feeling well generally, vomiting. For three years he had not been eating normally. He was described as the nervous type although his playing habits were about normal. He had lost ten pounds in weight. Four months ago the patient had an attack of cramping abdominal pain with diarrhea. This pain had recurred every few days. A virus infection was suspected by the family doctor.

On examination, there was tenderness about the navel area which had existed for four weeks. The temperature was 98.2 degrees, with a pulse of 90. The blood count showed 5,100 leukocytes, with 68 percent polymorphonuclears.

The surgical report was appendectomy with an appendix that was injected and inflamed. There were many enlarged glands in the mesentery of the ileum, with no Meckel's divertieulum present. The pathology report was chronic appendicitis with lymphoid hyperplasia.

The hospital convalescence was normal.

Four months after operation his mother states that starting the second week after the operation, the patient began eating and playing more normally. He has gained weight rapidly and has a better color. He is described as being a different child and now is quite a problem because he eats too much and is too active.

D.C. Girl, age 8.

Complaint on admission: Nausea, vomiting and abdominal pain. The onset of this attack occurred nine days previously when the patient became nauseated and vomited. A diarrhea developed after a laxative and lasted for several days. Generalized abdominal pain was present. The patient was forced to leave school several times because of nausea and generalized colieky pains in the abdomen.

Numerous similar milder attaeks had occurred in the past four months. The family doctor was called on three such occasions. He described the child as cross, a chronic complainer, no pep, sluggish, a poor eater, with many spasms of abdominal distress. The child had previously suffered an attack of streptococcie sore throat, in addition to the usual childhood diseases. Normal recovery had followed these ailments.

On examination, there was slight tenderness in the right abdomen. There was a systolic heart murmur. The temperature was 100.4 degrees and the pulse was 100. The blood count showed 5,800 leukocytes with 77 percent polymorphonuclears. The intern's diagnosis was (1) Appendicitis; (2) Rheumatic fever.

The surgical report was appendectomy, acute appendicitis with a fecalith obstructing the lumen in the proximal portion. There were numerous large glands in the mesentery of the distal ileum. The pathological report was chronie fibrotic appendicitis, with superimposed early edematous phase and lymphoid hyperplasia.

The hospital convalescence was uneventful.

Four months after the operation the mother reports that she never saw such a change in a child. The patient is now described as having a good appetite, has gained 8 pounds in weight, is not nervous, plays more, sleeps better, has better grades in school, has no abdominal pains and now has a good disposition.

M.C. Girl, age 11.

Complaint on admission: Attacks of nausea and vomiting. Abdominal distress was not present. The appetite was good.

On examination, there was rigidity of the abdominal muscles, especially on the right, with tenderness on deep pressure over McBurney's area. No attacks of cold or sore throat had occurred lately. The temperature was 101 degrees and the pulse was 120. The white blood eount was 13,600, with 60 percent polymorphonuclears.

The operative report was appendectomy. The appendix was injected and somewhat swollen. There were large glands in the meso-appendix and in the mesentery of the distal ileum. No Meckel's diverticulum was seen. The pathology report shows no definite inflammatory changes in the appendix but did show Oxyuris vermicularis.

This patient had a very normal convalescence except for a temperature of 102 degrees for six days postoperative. It then returned to normal in two days' time and the patient returned home, apparently normal. The eause of the postoperative temperature was not determined. The disturbance or ineision of the glands in the meso-appendix may have eaused a reaction. A virus infection may have been present.

The case is too recent to report on the postoperative progress at home.

M.D. Girl, age 18.

Complaint on admission: Nausea, sharp shooting pains in right lower quadrant of the abdomen. About a year previous the first colicky pains were noticed in both lower quadrants. These pains would be of two or three minutes' duration and were brought on by exercise. Her periods started at age 13 and the pains

seemed worse at that time. The appetite was variable, never good. She did not take a normal part in activities at a large children's home where she lived.

On examination, there was vague tenderness in the abdomen, more in McBurney's area. The temperature was 99.2 degrees, with a pulse of 96. The white count was 6,900 with 67 percent polymorphonuclears.

The operative report was appendectomy, the appendix being swollen, injected and bound down in midportion by adhesions. There was a large lymph gland in the meso-appendix and many enlarged glands in the mesentery of the distal ileum. No Meckel's diverticulum was observed.

Pathology report was appendix, sections appear almost normal; hyperplasia of lymph glands near the appendix.

The hospital convalescence was normal.

After eight months, the physician in charge at this children's home reports that the patient has made a great improvement. She eats well and is now normally active among the other children. The abdominal pains have not recurred. He states that this change for the better has been their experience with many other similar cases at that institution.

P.A. Girl, age 9.

Complaint on admission: Nausea; vomiting; diarrhea; pain in abdomen. Two days previous, the patient became nauseated, vomited and had generalized pain in the midabdomen. There was localization of distress in the right lower quadrant that morning. There were three bowel movements that morning. The pain had continued, although not severe. When food was taken, nausea and vomiting occurred.

The patient had experienced most of the childhood diseases, plus a streptococcus throat.

On examination, the abdomen was soft, flat, with no muscle spasm. There was tenderness on point pressure over McBurney's area. No rebound pains or Rovsing's sign present. The temperature was 99.0 degrees and the pulse was 86. The white blood count was 5,500, with 72 percent polymorphonuclears.

The surgery report was appendectomy. The appendix was elongated and inflamed throughout. The glands of the mesentery of the distal ileum were greatly enlarged. The pathological report was acute appendicitis.

The patient had no complications during her hospital stay.

After eighteen months we were unable to contact this patient concerning follow-up.

OBSERVATIONS AND STATISTICS ON OPERATED CASES

The white blood count and the polymorphonuclear count are not elevated in the majority of cases of mesenteric lymphadenitis. The temperature is often near normal.

A recent survey at the Methodist Hospital shows that in 250 cases of *acute* appendicitis there were 13 cases, or 5 percent, with enlarged glands in the mesentery of the distal ileum. Glandular enlargement is not a common finding with the acute type of appendicitis.

In many cases no further exploration is made when the appendix is acutely inflamed. When the appendix pathology does not measure up to expected severity the surgeon usually inspects the ileum for a possible inflamed Meckel's diverticulum. It is at such investigation that the enlarged mesenteric glands of the ileum are observed in many cases.

There is a tendency for surgeons to report an appendix as acute, especially when this terminology is better adapted to the "atmosphere" created in surgery by the emergency operation. This fact may alter the statistics as regards the type of appendicitis which is associated with mesenteric glandular hypertrophy.

In a series of consecutive cases at one of the hospitals, personal observation revealed that 20 percent of the patients operated for all types of appendicitis showed glandular enlargement in the mesentery of the distal ileum.

In a group of 25 appendectomies where the writer demonstrated these enlarged glands, the following age incidence was noted:

Age 5—1	Age 8—7	Age 11—2
Age 6—2	Age 9—4	Age 12—1
Age 7—2	Age 10—4	Age 16—2

CONCLUSIONS

Adolescence apparently brings about an improvement in the pathology of this condition, as is noted by the marked decrease in symptoms and operative incident thereafter. It would seem from personal observation that occurrence in boys extends a few years longer, which is in keeping with the puberty age. Some of the undernourished adult digestive problems—those who are never well, but never seriously ill—may have been the unoperated children who suffered from glandular hypertrophy of the ileum and questionable appendicitis.

In view of the marked improvement in these cases following operation where the appendix is removed, it is the belief of the writer that the appendix, even though it appears relatively innocent, in many cases is an influencing factor in the lymphadenitis of the distal ileum. If the glandular hypertrophy is not a result of appendiceal pathology, then the marked improvement must come from the opening of the abdomen, as in the case of tuberculous peritonitis.

The spasmodic, variable eating and playing habits of these children have received very little attention in the articles written on nonspecific mesenteric adenitis. The parents comment on these symptoms more than on any others and often remark about the increased appetites and activities of their children after operation. It is always well to inform relatives that postoperative improvement may be slow—a matter of weeks, or even months. However, this type of case is the most gratifying and satisfying that surgeons encounter in that recovery is almost spectacular as reported by the parents and the referring physicians.

This disease presents characteristic symptoms and findings. It should be suspected in undernourished children who have fickle appetites and spasmodic playing habits and who complain of attacks of abdominal pains which are colicky in nature and are prone to recur.

GENERAL TREATMENT IN THE MORE SEVERE TYPE OF BURNS

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THE treatment of severe burns begins immediately. Morphine in adequate doses should be given at once in order to reduce shock by the prevention of as much pain as possible. Morphine is given in doses as high as one-half grain to our patients with severe burns. This may be repeated in two to three hours, if necessary.

The general treatment of shock is instituted at once. The head is lowered, the patient is kept warm. Massive sterile dressings are applied over the burned area and the clothing is not removed until after transportation. The clothing and the burned structures are sufficiently sterile to provide a portion of a satisfactory first aid dressing.

The patient is moved to the hospital where a separate crew has been instructed in the use of our technique in the handling of severe burns. I have prepared a set of materials which is always kept in readiness for these types of burns, which you may obtain. The patient is put in bed on sterile linen. One portion of the burn is cleaned at a time, without disturbing the other portions. This is necessary for the control of pain, prevents too severe an effort by the patient, and aids in the reduction and control of shock. The burns are cleansed with mild soap and water; sometimes benzine is used or even ether. This is especially true in greasy burns. The blisters are kept intact and the burned fragments of tissue may be removed if they can be removed without pain to the patient. We have never made an extensive debridement requiring an anesthetic. The debridement which is used has been without effect upon the general condition of the patient. Many of the supposedly destroyed areas will produce islands of epithelium from which new skin may grow. With the cleansing of the burned areas, a cod liver oil based ointment is applied to the burned tissue. The burn is completely covered with this ointment. The gauze that is used is of a narrow mesh quality and has been prepared beforehand and placed in a flat pan and impregnated with the above ointment so that the burn may be covered rapidly with the ointment with the least possible loss of time. External heat is mantained, the patient being kept warm but not too hot. Extreme heat tends to produce shock and hastens fluid loss. With the covering of the entire burn by the narrow mesh, impregnated gauze, dry gauze is then applied over the first layer of gauze to sufficient thickness. This is now covered by sterilized mechanic's waste which will maintain an elastic pressure and prevent the fluid loss which is so detrimental to the general condition of the patient. The pressure dressing may now be covered by a form of bandage which is very often in the nature of a five-yard roller bandage, and in extensive burns we like to use the so-called "overall system," which consists of the use of stockinette fitted to the patient and sewed firmly over the mechanic's waste, thus insuring a stabilized dressing which will not become disarranged.

Plasma is started immediately in burns of any extent. The percentage of the body tissue destroyed or involved in the burn is one of the important factors in the anticipated amount of plasma needed and also in the ultimate progress of the patient. The head is considered to be 6 percent of the body surface; the trunk, including the neck, 38 percent; anterior surface only 20 percent; posterior surface only 18 percent; upper extremities, 18 percent; arms, 13.5 percent; hands, 4.5 percent; lower extremities, including buttocks, 38 percent; thighs, 19 percent; legs, 13 percent; feet, 6 percent. It is well known that extensive burns, even if they are superficial, but extensive in the amount of body involved, are particularly dangerous. They are more dangerous in children than in adults. It is common knowledge that a burn of one-third of the body carries a very guarded prognosis. With the treatment outlined we have had many patients with burns of 50 to 80 percent of the body survive. It is our custom to use a form of tetanus serum, usually the combined antitetanic and gas gangrene serum. This is especially true in the extremely dirty burns which we so often see. The plasma need is calculated upon the basis of 50 cc. per 1 percent of body surface burned.

In all burns the body loss of fluid, including salt and serum, is extremely high and rapid. Consequently it is necessary to supply an enormous solution of saline with glucose, as well as plasma, to the patient until such time as the loss of the chlorides in the body, water and serum has become under control. With extreme loss of the fluids and the chlorides, as well as the serum, the burned patient suffers from a toxemia which is detrimental to the welfare of the patient and may result in toxemia affecting the liver, spleen, kidneys and adrenals.

Occasionally there is a total suppression of urine. In these patients one of the best methods

of controlling this particular symptom is by the use of fluids, the use of diuretics and the application of heat over the kidney region.

The patient's blood pressure is watched constantly, if it is possible to apply the cuff. The blood count, especially the red count and hemoglobin, are taken every two hours. This is an indication of the need for plasma as well as the percentage of burned tissue. The hemoglobin becomes concentrated during the first 24 to 48 hours. The red blood count becomes increased due to the loss of the blood proteins and serum. One of the first symptoms of a hemoglobin concentration is that of nausea. Large amounts of plasma should be given the first hour. This should be followed by the saline and glucose in large amounts to supply a buffer for the liver, in the form of the glucose, and to supply the chlorides, in the nature of the saline, to replace the chlorides which are being lost with the seepage. In a patient of 150 lbs. the fluid requirements would be 1200 cc. for vapor loss, 1000 cc. for metabolic, and at least 1000 for loss through the burned tissue. In addition to the plasma, as calculated by the above, the symptom of the hemoglobin concentration may indicate the need for plasma, which is calculated on the basis of 50 cc. for each degree above 90 of the hemoglobin reading. Plasma should be given on the calculated basis during the first 24 hours—one-third within the first two hours. After the first 48 hours the body needs should become much more stabilized. However, the above laboratory work must be continued but not as often as previously—two or three times daily. An adequate index as to fluid intake is by the urine concentrate after the first or second specimen, as judged by the specific gravity. Plasma loss is usually at a minimum near the end of the 48 hour period.

During the initial stage, shock, hemorrhage if any, and the general condition of the patient must be sustained. During the second 48 hours, concentration of the hemoglobin becomes nearly normal and often becomes progressively lower with the development of a secondary anemia. This must be guarded against by the usual methods, by the supplying of iron and by transfusions. It is our custom to use a combination of iron and vitamins in massive doses. It is also our practice to attempt to supply a buffer solution and guard against kidney damage by the use of potassium citrate four times a day.

We have at hand now the sulfa drugs, which we use in the absence of vomiting, and penicillin, which may be given every three hours, from 30,000 to 50,000 units at a dose. The burned patient should be encouraged in eating in order to help himself against the anemia which is sure to develop. Blood transfusions may be necessary, as we know that healing occurs much more rapidly when a severe secondary anemia is not present. Calcium should be supplied, inasmuch as there is an enormous calcium loss in the serum.

The patient's general condition is watched carefully. We try to leave the pressure bandage in place as long as is feasible, preferably from a week to ten days without re-dressing. Indications for dressing are infection, as manifested by excessive drainage and temperature; and when the dressings become dry, sticky and uncomfortable to the patient. At the time of dressing, the patient is given a hypo in sufficient time for it to act at the time of dressing. We attempt to change the dressings by taking one or two parts and reapplying the same type of dressing as used before. This is continued daily until the dressings have been completely changed and then as indicated by the drainage. At the time of dressing, the person doing the dressing should be equipped with a cap and mask, sterile gown and sterile gloves. Sterile instruments should be used and the burn inspected. The slough that can be removed should be taken from the burn. The blisters may be punctured and the burn generally cleansed by surgical interference. This is true of the subsequent dressings also.

In all extensive burns there is a varying degree of intensity over the various areas. Consequently, even with the first dressing we are likely to find areas of new epithelium and considerable areas of the more superficial burned areas to be completely healed. This, of course, aids the welfare of the patient.

The nursing care is directed toward the comfort of the patient. To prevent contractures and immobility of the various joints, the active motion of the patient is encouraged, especially in the elderly, to prevent pneumonia. Early use of a back rest is encouraged. At each dressing the slough that we are able to separate, is removed.

The next phase of the treatment of burns is the restoration of epithelium to the parts. In extensive burns, many areas are still infected and involved in sloughing. Consequently, massive grafts might be lost so that we would not have sufficient skin to use for subsequent grafting. Therefore, repeated grafts are done in the areas in which the granulations have become strong enough to be receptive to the grafts. These grafts are of the pinch type variety and we usually use from twelve to twenty-four at a sitting. These are placed about one and one-half to two inches apart. In most instances, this will provide an epithelium basis that will heal itself satisfactorily. In areas of slough or infection, hot, wet dressings are applied constantly. This is true especially in the circular type of burns, particularly around the ankle and wrist, which have a constrictive effect and produce considerable edema of the extremities. Wet dressings are also applied to infected areas and for the removal of slough that is persistent. In the smaller burns, where skin graft is required and the area has become clean and the granulations have been prepared by saline for skin graft reception, massive grafts are used and in many in-

stances the area is entirely covered at one sitting. Massive grafts of full thickness variety are preferable in the extremities, particularly the feet. The early use of skin graft, particularly where contracture may occur as, for instance, in the back of the knee, does a great deal toward the prevention of contracture at a later date.

During the healing, care must be taken to maintain extension and to see that the patient does not hold the extremity in a position of comfort which favors that of contracture. Active motion, particularly of the extremities, is encouraged to prevent muscular atrophy. Early activity is encouraged, especially in a wheel chair.

THE MANAGEMENT AND TREATMENT OF GOITER

GOETHE LINK, M.D.

INDIANAPOLIS

RECENTLY introduced remedies for goiter and improved surgical measures warrant a review of the best methods to follow in the management and treatment of goiter.

Physicians are more thyroid-minded than ever before and much more able to make a diagnosis in the less obvious types of goiter. It is now unusual to see a goiter case treated for some other disease, as I saw recently: the patient was treated for diabetes and put on a low caloric diet. Such a mistake can be avoided by palpating the thyroid gland, which should always be done when a patient has an increased pulse rate with no fever. Palpation of the gland enables one to detect the slightest pathologic change and is an undeniable basis for diagnosis. Standing behind the seated patient, one strokes the gland, gently pressing it against the trachea. The nature of the tissue changes as recognized by the palpating fingers is more important than the size of the gland. For example, soft tissue indicates stored colloid and less activity, while multiplication and crowding of secreting epithelial cells into the acini gives a firmness which is always found in hyperplastic goiter. Practice will quickly increase one's acuity in correlating the condition of the thyroid tissue with the symptoms, by palpation.

Palpation of the gland is also useful in recognizing those cases of neurocirculatory instability whose symptoms mimic the symptoms of thyroid disease perfectly. Here ability to palpate the normal gland and to determine that the tissue is normal enables one to make a differential diagnosis which is reliable.

In the early years of thyroid surgery the only help we had in reducing hyperthyroidism came from rest and natural remissions. We learned then that operation could only be done safely in a period of remission. Remissions were also initiated by tying the thyroid arteries, and single lobectomy often was the most that could be done at one sitting. After 1922, when Plummer introduced the use of iodine, it became possible to bring about a remission in most toxic goiters and the mortality of thyroid surgery was lowered. A few cases in which iodine did not bring down the hyperthyroid level sufficiently still left the surgeon with a hazardous factor of safety, and some of them necessitated ligations and lobectomies just as in the pre-iodine days.

Iodine was often employed as a cure for goiter, which it is not, and when it was given over several years its beneficial effects were used up before the patient was brought to surgery. The surgeon was constantly faced with the patient's demand to get well quickly, for all toxic goiter patients are in a hurry; and choosing the time when the basal metabolic rate was thought to be low enough to enable a safe operation, and at the same time gratify the patient's demand for haste, frequently contributed to the mortality rate.

Thiouracil came as the answer to the thyroid surgeon's prayer. Its ability to lower the basal metabolic rate of all goiter cases to normal gave us the means to prepare for safe operation those remaining cases in which iodine failed. As with iodine, efforts were made to cure goiter medically with thiouracil but, like iodine, it was found that thiouracil will not cure goiter; it is only useful in preparing the patient for safe surgery.

Thiouracil alone can not make a toxic goiter a safe surgical risk; it is only another important aid. It is still necessary to use all the knowledge acquired in the past in preparing the patient and to decide properly when the best time for operation has arrived. Thiouracil lowers the metabolic rate, nothing more.

Thiouracil is not an unmixed blessing and introduces new dangers of its own, causing us to hold fast to that which is good in iodine and to limit the use of thiouracil to those cases where iodine has failed to lower the B.M.R. to a safe range. The intrinsic factor of danger introduced by the use of thiouracil is offset by our being able to operate many patients with a normal B.M.R. with thiouracil, instead of with plus 40 or 50, as we had to do occasionally with iodine.

Since we have the means for bringing all hyperthyroid patients' B.M.R.s to normal, the question arises: should we defer operation until the rate is normal in every case? Again the matter of time and the patient's hurry enters our problem.

Thiouracil is slow in its effect. A reduction of one point in the B.M.R. a day is the best we may expect from thiouracil. In some cases it will subside at a much slower rate. Are we then to operate when the B.M.R. reaches plus 25 after it has been plus 75? The answer is no. In this connection, Dr. Frank Lahey has said: "You know what to expect after a thyroidectomy in a patient with a normal B.M.R., when the B.M.R. is plus 25 you are not certain what the result may be." It appears, then, that to have the lowest possible mortality we should bring all goiter patients' B.M.R.s to normal before subjecting them to surgery.

When the B.M.R. has been reduced to normal with thiouracil or propyl-thiouracil, even after having been in a high bracket, there is no hyperthyroid reaction after thyroidectomy, any more than there would be after an ordinary appendectomy. It is necessary, however, to keep a patient under treatment awhile after his B.M.R. has reached normal, to enable him to accumulate some reserve to carry him through the operation. A recent case illustrates this point: a patient who had a very active goiter and whose B.M.R., after being plus 70 had been brought as low as plus 23, became impatient with me because I would not operate then and there and engaged another surgeon to remove her goiter. She died under the anesthetic. Had she waited longer she would have acquired enough reserve to carry her safely through the operation.

That the mortality in goiter surgery with our present surgical methods, iodine, thiouracil and propyl-thiouracil, is low is shown by the fact that I have an unbroken series of twelve hundred thyroidectomies since a death has occurred after operation. Dr. Lahey reports one sequence of sixteen hundred cases between deaths.

Although we were fortunate in not encountering a thiouracil complication of importance, we have used propyl-thiouracil since its introduction, as it is considered to be less toxic and safer. We have often been obliged to give more than the stated dose of propyl-thiouracil in order to get the needed effect. We have given as much as 300 mg. of propyl-thiouracil daily; others have found it necessary to give as high as 400 mg. and 600 mg. daily with good results. We have quit worrying about the patient's blood, only making blood examinations as seem indicated by the clinical picture.

Treatment of goiter with x-ray has little, if any value. I have operated on many goiter patients, each of whom had received a full series of x-ray treatments; they still had their goiters, were still toxic and needed thyroidectomy. Unless they had telangiectasis in the skin from too much x-ray, there was nothing to show x-ray had been used, no change in the goiter, either macroscopic or microscopic. The thyroid gland is not sufficiently radiosensitive that enough x-ray can reach it without burning the skin. Efforts are being made to treat goiter by introducing radiation into the substance of the gland with radioactive iodine. This work is still in the experimental stage.

Treatment of the hyperthyroid factor in active nodular goiter is the same as for diffuse goiter. Iodine is first given; if it does not lower the level of toxicity sufficiently, propyl-thiouracil is used. All nodular goiters should be removed, whether active or quiescent, the active ones after the B.M.R. has been lowered to normal by treatment. The heart disability and other complications due to years of ignored toxicity are medical problems which must be properly treated before thyroidectomy.

The euphoric advice about a nodular goiter: "Never bother it until it bothers you," is today, with our low mortality rate in thyroid surgery, highly improper. All nodular goiters have an insidious toxic effect which finally culminates in disaster.

The danger of malignancy alone should shape our course in nodular goiter. In this connection I can do no better than to quote from the Indiana Cancer Bulletin: "Thyroid cancers most often result from malignant degeneration of erstwhile benign thyroid adenomas. This would suggest that *routine surgical removal of adenomas* of the thyroid should be practiced as a prophylactic measure, because about 5 percent of adenomas show beginning malignant changes when microscopically examined." Also, "Hence, thyroid cancer could probably be reduced to a rarity if all thyroid tumors were routinely removed when diagnosed."

I heartily subscribe to this sound advice.

CONCLUSIONS

1. Palpation of the thyroid gland is the most reliable basis for diagnosis in goiter.

2. The safe time for thyroid surgery is during remission of hyperthyroidism.

3. Iodine will cause a remission in many cases.

4. In those cases not brought to remission by iodine, propyl-thiouracil will produce the desired result.

5. Neither iodine nor propyl-thiouracil will cure goiter; they are only to be used to prepare goiter patients for safe surgery.

6. The mortality from thyroid surgery is so low now, our 1,200 cases without a death, Dr. Lahey's 1,600 cases without a death, that the risk of toxicity and cancer is far greater than the risk of surgery.

7. Routine surgical removal of adenomas of the thyroid gland should be practiced as a prophylactic measure.

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THE JOURNAL

OF THE

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THE JOURNAL'S PLATFORM

1. Preservation of American Medicine through voluntary service to the sick.
2. Advocating full-time county or district health officers, locally appointed.
3. Restoration and preservation of our natural waters and resources.
4. Maintain the present high standard of the Indiana University Medical Center, combining the full medical course in Indianapolis.
5. Elimination of diphtheria and smallpox through immunization and vaccination.
6. Support of the state-wide campaign against undulant fever.

Editorials

RURAL PRACTITIONER NEEDS CLINICAL LABORATORY

THE provision of uniform medical service to all sections of the country is one of the most important problems which confronts the medical profession today. The tendency during recent years for practicing physicians to concentrate in the larger centers of population is producing areas of rural and small town practice which are not adequately covered. Much has been written concerning the effects of, and the reasons for, this change in the distribution of medical care. It is evident that the causes underlying this trend are numerous and that it is impossible to judge with any degree of certainty as to the relative importance of the various factors involved.

Economic factors must be considered. It is only natural that young practitioners will be attracted to areas in which material returns give promise of being the most secure. This rule of practical finance will explain why the economically unsound rural areas of the United States are in short supply of doctors. It will not, however, explain why there are rural locations and small towns of our own state of Indiana in need of medical help, especially in this era of agricultural prosperity, and when it is remembered that the rural people of Indiana have always been considered as excellent credit risks, even in poor times.

The urban advantages of good streets, good telephone service, and the fact that a city practice is usually thought of as consisting of a concentrated group of patients, no doubt induces some doctors to choose a large town. However, improvements in recent years in communication facilities and in country roads probably give the rural practitioner the advantage, since he is spared the troubles of congested traffic and lack of park-

ing facilities. Frequently a neighborhood practitioner in a large city will find himself driving farther than his colleagues in the rural areas, and without the privilege of charging for mileage.

Since the financial and environmental factors did not interfere with the practice of medicine in small towns in years past, and since such considerations do not appear to be particularly potent at the present time, it is reasonable to suppose that the practice of medicine itself has changed and that this change may have influenced its distribution.

Changes in medicine have not been slow, but they have been so gradual that one must pause for a comparative "look-see" now and then, in order to appreciate the evolution which has occurred. Not only has the bulk of knowledge concerning the nature and treatment of disease become remarkably complex, but, within the past few decades, there has also grown up a really tremendous array of diagnostic aids in the form of laboratory and technical procedures.

Today hematological studies, blood chemistry determinations, diagnostic roentgenograms, and microscopic study of discharges and secretions, which thirty years ago were regarded as interesting and occasionally helpful, are rated as indispensable to the good practice of medicine.

To say that such aids are rated as indispensable by the physician would be only a partial acknowledgment of the problem. The public has become well-educated in medical matters, and has come to expect that reliable laboratory procedures will be employed where indicated for diagnostic purposes.

Facilities for such clinical studies were originally concentrated in the larger centers. They are now being made available to more and more communities, but as yet are not accessible to the practitioner in small towns, except by transporting the patient or a specimen a distance of twenty to thirty miles.

It is not difficult to understand why a young doctor, who has been trained in a modern hospital, where roentgen studies, blood counts, and blood sugar estimations are almost routine, would hesitate to commence practice in a location where he was to be the only physician, and where such diagnostic help was not available. In fact, it must require a person with a genuine pioneer spirit to launch into a solitary practice with only such instruments as may be carried in a handbag.

Physicians in small towns have often reported that their patients were most loyal, and relied upon them for relief of any number of acute emergencies, but when time allowed would drive past the local doctor's office and proceed many miles to a larger center for study and treatment of their more chronic and often more interesting complaints. A recent graduate in medicine would certainly feel disappointed to lose the opportunity of managing a diabetic simply because of his inability to estimate the patient's blood sugar, when his clinical training would otherwise fit him admirably for this task.

There are several tendencies and developments in the practice of medicine which do tend to relieve the spotty distribution of laboratory facilities, and which the medical profession should recognize and encourage.

Recently a small western town, which had been attempting unsuccessfully to attract a doctor for some time, raised $30,000 by a bond issue. This sum of money was used to construct a small modern office building which was completely equipped for office practice. A recent graduate of their state medical school was established in the office before it was entirely finished.

This incident illustrates what a small community can do to encourage the establishment of medical service, and suggests that one of the factors which discourages the setting up of practices in rural communities may be a lack of office and/or living facilities. It also raises a practical point of the amount of initial investment necessary to provide an office with the proper amount of laboratory equipment. Very few young graduates are endowed for a large outlay. Communities in need of a doctor may find that this is the answer to their problem, since it would provide minimal x-ray equipment and would, with the addition of a trained laboratory technician, make possible the conduct of a highly satisfactory general practice.

The tendency in Indiana for the establishment of clinical and x-ray laboratories, in connection with the smaller hospitals, has accomplished much toward supplying these important aids to general practitioners. As the number of available clinical pathologists and roentgenologists increases, their entry into practice in county seat towns will further improve the distribution of laboratory facilities.

In the meantime, the medical profession should not only encourage the opening of new general practices in rural areas, but should also do what is necessary to provide better distribution of the modern clinical laboratory aids, without which the general practice of medicine tends to become dull and uninteresting, and somewhat less than satisfactory.

Make Your Reservations Now
for the
Ninety-Ninth Annual Session
of the
Indiana State Medical Association
at Indianapolis
October 26, 27 and 28

"SUFFERETH LONG"

THIS is the title of an editorial in *The New England Journal of Medicine* of June 24. We wish to thank the editor for expressing many sentiments we have had for years, but withheld too much comment thereon, since it is a "hot" subject. His opening paragraph will serve to tell us just what he had in mind when he wrote the article. "The time has come for a fresh apprisal of the various charitable undertakings of the country, regarding both their needs and the means of supplying those needs. Scarcely a week now passes in which some special drive is not staged and a particular appeal presented; the demands are insatiable, the claims are constant, and some equitable method of assaying and allocating to each its share of the available resources must be evolved."

He states that in Boston a study is being made to analyze the expenditure, in 1946, of some $80,000,000 by tax-supported and voluntary agencies.

Now what is true in New England is true all over the nation. Not millions, but billions of dollars are being spent in these movements. Of course we are all agreed that, for the most part, this stupendous expenditure is necessary and justified, but we also agree with the Boston editor that this "drive" problem is fast getting out of control. The "emotional appeal" is a big thing in these solicitations. For example, each summer we receive an average of three appeals from a New York City agency that conducts summer camps for "underprivileged" children. We do not respond to these, as we used to do, for the reason that right here in Indiana we also have kiddies who need such help—and they get it.

A few years ago we sent a few dollars to a Negro school in the south; not too long after that we got letters from other such schools. They now are off our list.

The Foundation for Infantile Paralysis was a highly successful undertaking, and no doubt this had much to do with other organizations instituting a similar program—most of them highly successful.

In most instances we have no objection to the activities of these nation-wide campaigns, except occasionally to wonder if they are not overstaffed—too much money being paid out in "organization expenses." We get a lot of "stamps" in our mail but aside from the annual Christmas Seals we do little about them. True it is they do not cost so much, from one to three dollars, but if we answered every such appeal it would make a sizeable total at the end of the year.

The Boston editor concludes that "the nation's money-raising enthusiasm should be tempered with sound judgment," and with that suggestion we are thoroughly in accord.

THE NOVEMBER ELECTION

THE JOURNAL definitely is not in politics; as long ago as early in 1933 various policies were determined by the Editorial Board. Number one item on the list was a consideration of the political policy of our magazine. It unanimously was decided there would be none—that one person, the editor, should make political comment when deemed advisable.

This policy has been lived up to in every way; very occasionally have we had anything to say regarding strictly political matters. In the establishment of this policy we had before us another medical magazine, published under the direction of one of our larger states. The editor each month used several pages to express his views on various economic matters, chiefly of a political nature. We never were in accord with this program, though the editor was a good friend of ours.

But times have been changing, it seems; we now have arrived at the point where our very existence as a "free" profession is challenged—it has been challenged for a long time. We have defended our position, our very right to an untrammeled existence; we have gone before national legislative bodies, attended committee "hearings" time without end and number. We believe all this labor has not been without its reward, in some degree, since we have interested millions of our population in our behalf; a very large proportion of the daily and weekly newspapers have come to help us bear the standard of a non-regimented profession; yet the thing goes on, aided and abetted by federal officials of high rank and promoted by a largess from the federal treasury that has assumed no mean proportions.

The thousands of "employees" now engaged in "an advancement of health measures," most of them not of the medical profession, have assumed regimental proportions; it is but natural that they would like to continue in their "soft" jobs. On occasion they have not stopped at the borders of our country in their endeavors to promote what commonly is called "Socialized Medicine." Witness the not-too-long-ago attempt to promote such a program in Japan.

They seem to have had the backing of the "administration" in many of their maneuvers, certainly they had a large "expense account!"

As of today, when the election is not far away, the leaders of this group are very active—some openly and some furtively. We still hear of Falk, Davis, et al., and know they are not quiescent.

We are making no recommendations as to how any Indiana physician should vote, come next November; we recommend only that they keep both eyes and ears open, that they may know just what is going on. At this writing, but one presidential candidate has been named; he publicly has proclaimed that he definitely is not in favor of socialized medicine; it remains to be seen what the other major candidate will have to say.

Someone recently said that American Medicine is at the crossroads; we believe it is far more grave than that—we believe that American Medicine has its back to the wall and must fight it out. Certainly we do not wish to face the plight that is now confronting British Medicine; those who have been on the ground there have made observations that are most astonishing, to say the least.

THE JOURNAL has but one recommendation to make, and that is that when you go to the polls next November, do not approach the polling place with the thought in mind of voting Republican, Democratic, or whatnot—go there with the determination to vote for AMERICAN MEDICINE.

"DOCTORS SCARCE"

SO READ an article in *The Indianapolis Star*, July 3, by our favorite columnist, Maurice Early. He somehow or other felt that the supply of physicians in Indiana was inadequate, getting his figures from reports in several other states. But Maurice, like all good reporters should do, went right over to see Ray Smith, our executive secretary, who proceeded to set him right in the matter.

It seems that Early had had access to figures way back in 1909, the time when every cross-roads community in Indiana had its local physician. In all small towns there were two, three or more located there. By 1942 the total number had dropped to something like 871 less physicians in the state of Indiana.

It developed that, after talking with Ray, there still was a shortage of the gross number of Hoosier physicians, as compared with some of our neighboring states. But, after all, Indiana does not have a shortage of physicians, according to our executive secretary.

In 1909, as Ray pointed out, there were few automobiles—fewer good roads that an automobile could travel. The "horse-and-buggy doctor" still predominated; there were very few telephones outside the larger cities and towns. Hospitals were unknown, save in the larger cities, and laboratory and other technicians were just nonexistent in most sections of our state.

Today, as Ray pointed out, much of the load is taken from the physicians by the hospital facilities and the large force of technicians. If it is a matter of diet, x-ray examination, laboratory tests of a sort, these are taken care of by other than the local physician.

He answers a telephone call and even if it is a matter of several miles to the home of the patient, he gets there in "jig-time."

But we of course are aware that we can use more physicians in Indiana and are making every effort to get them located here. The Indiana University Medical School had the largest enrollment in its freshman class in its history—in fact, it is said we have one of the largest classes in the country. We have teaching facilities to take care of this enrollment, but gravely are in need of more room on the medical campus.

We need a new and much larger building and plans are now being made to ask the 1949 legislature for funds for that purpose. And, while we are about that chore, it would be well to remember that one of our "musts" is to bring the first-year medical school to the Indianapolis campus.

Editorial Notes

This is our third annual "General Practice Number," and THE JOURNAL takes much pleasure in according most of the credit for its "sure hit" performance to Dr. Harry E. Klepinger, of La-Fayette. The doctor spent a lot of time in getting together this material and, in our opinion, has produced the best thing of its kind we ever have seen. One paragraph in his letter to us indicates just what he had in mind when he undertook this task, "My intention back of the special articles has been to present evidence to the general practitioner of the role he should play to elevate his standards and to gain and hold the respect of the profession."

Thanks, Dr. Klepinger, for what Tom Hendricks would term a "swell job"

Arkansas is one of latest of the state medical organizations to employ a full-time lay executive secretary. Mr. Sid Wrightsman, Jr., whose business office is located at 310 Professional Building, Fort Smith, is the newcomer.

We never could understand why *every* state medical society has not long since taken this step; it is too much to ask of any man in active practice to undertake such a task when in these days there is so much to be done.

Of course there are some instances in which a physician has seen fit to give up his practice and take over the job, but there still are too many instances in which an active physician is doing this work, although it interferes with his professional activities. We often have wondered how Brooksher managed to attend to his practice, down in Arkansas, and at the same time do a bang-up job as secretary-editor for his state organization. One thing helped out, in the later years. He acquired his own plane and learned to operate it!

President's Page

THE GENERAL PRACTITIONER

RECENTLY there has been much discussion concerning the role of the general practitioner in our present scheme of medical care. Specialization was given a great impetus during World War II by the unequal opportunities afforded the general practitioner as compared to the specialist. Now there is a great clamor by almost all young physicians to secure specialized training with a view toward specialty board certification.

It is interesting to note that after World War I there was the same rush toward specialization, and the same fears were expressed that physicians were becoming overspecialized, although the movement did not gain nearly as great momentum as at the present time. Even after the Civil War and the Mexican War there was an upsurge of specialization.

There is a relatively small group of physicians who believe that the general practitioner may become more or less extinct, and that his place will be taken by specialists practicing in groups, particularly in populous areas. Most physicians do not hold this view, but believe that the general practitioner must continue to care for the great majority of illnesses of our people.

There are many reasons for this belief. First, the average individual wants a family doctor to whom he can go for consultation concerning his troubles, whether they are large or small. He wants to consult someone he knows, someone who knows his history background and financial problems. He likes being treated as an individual and not as a sinus, a gallbladder or a diseased skin. Secondly, education is a leveling process. Popularization of medical knowledge and improvement in local health facilities have tended to level the profession in the eyes of the public. The era of the super-specialist has passed. And thirdly, the present knowledge of psychosomatic relationships and the high cost of specialized psychiatric care have shifted the burden of the care of these problems back onto the family physician.

We must revise our thinking about the general practitioner and especially prepare him for his job. He should not be a family doctor because he was unable to secure specialist training in some one field, but because he wished to follow that field of medicine, and he should be especially trained for the job. More emphasis should be placed on general practice in our medical schools. A reasonable portion of teaching of students should be done by successful general practitioners. Some medical schools are attempting to secure preceptorship for their students, during their junior year vacation, with successful general practitioners. This type of education should be encouraged.

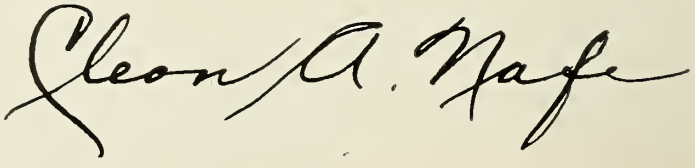
The intern preparing for general practice should have a well-rounded rotating internship, and should be permitted to gain more experience in the procedures that he will be called upon to do frequently in his practice. Already some hospitals have established a two-year training program in general practice. More hospitals should offer such a program.

Before any physician can be a competent specialist he should be a good doctor, and should be well acquainted with all of the diseases of the human body. It, therefore, might be well to urge that the specialty boards require that each applicant have at least three years' experience in general practice before specializing, and that hospitals reserve a major portion of their resident training positions for men with such experience. The specialty training program then could be lessened, because out of his own experiences the physician would have acquired unusual training that especially fitted him for any type of medical practice.

For the general practitioner who wishes to specialize in some field, our hospitals and teaching centers should furnish a limited amount of opportunity to acquire new knowledge and experience by doing special work while he still retains his private practice. In the past, fine specialists were developed in that fashion, and that opportunity should still be available, at least to some degree.

The general practitioner is a vital part of our system of medical care. He should not be denied the proper use of available hospital facilities. There are certain intricate procedures that must be limited to specialists in that field, and the competent general practitioner will recognize his limitations. Our present system of medical care is very complicated, and no one can cover the whole field. The specialist and the general practitioner are equally necessary.

It is the duty of organized medicine to see that the rights of the general practitioner are preserved, and that his opportunities for financial reward and for educational advancement are commensurate with those of the specialist. This will be of immeasurable aid, not only to the general practitioner himself, but to his patients and the country as a whole.



THE SCIENTIFIC ORGANIZATION OF THE HOSPITAL

J. K. Berman, M.D.

INDIANAPOLIS

THE modern hospital has three fundamental objectives: (1) the care of the sick, (2) the training of young men and women for careers in medicine, (3) the pursuance of research in medicine.

THE CARE OF THE SICK

Obviously, the primary and most important endeavor of the hospital is to care for those who are ill. However, the diagnosis of disease has become so complex and its treatment so intricate that the proper care of sick people cannot be accomplished without the help of all the divisions in medicine. For this reason, in addition to the services of the attending physician, circumspect attention of those who are ill is dependent upon other services within the hospital. These may be listed as follows: (1) adequate nursing care, (2) a competent resident and intern staff. In addition, the hospital should provide physical facilities for the activities of: (1) a full time pathologist, if possible, (2) a full time radiologist, if possible, and (3) department of anesthesia. These three consulting services should have available the equipment necessary for their diagnostic and therapeutic functions, either as provided by the hospital or by the chief of each service. It must be clearly understood that they are consultants in every sense of the word and that they should be apprised of all pertinent facts in the history of the patient's illness, together with all clinical findings. In other words, they must see the patients clinically, as well as through their special divisions. Let us briefly review the relationship of the attending staff to these fundamental inside services, without which the modern hospital cannot operate.

The nursing staff and the attending physician.—A few years ago the staff society was interested in nursing as a well-wishing bystander. Indeed, the staff furnished teachers who gave perfunctory lectures to the nurses and, in fact, "talked down to them," so that they would get a brief and bird's-eye view of medicine as it is practiced. Today, an entirely different attitude has taken place, due to the fact that the physician has come to realize that without the help of nurses and without their services his written orders cannot be carried out. Furthermore, he knows that the supply of nurses has dropped steadily until the problem has become acute. Therefore, today every physician is vitally interested in recruiting eligible young women for careers in nursing. Moreover, he is now reviewing the quality and quantity of instruction and supervision that is being given in schools of nursing. Instruction as now given by the physician is designed to teach the nurse to be a competent helper. He does not, for example, attempt to teach her how to make diagnoses and to treat disease. He does want her to understand the objectives of the physician in the diagnosis and treatment of disease. In other words, the medical education is applied to the particular line for which the individual is being trained, namely, that of nursing. Thus she is not taught how to diagnose a stone in the common duct or a carcinoma of the head of the pancreas. However, she is told to chart the color of the stools and urine and she is given the reasons for the necessity of this charting; not the different types of congenital anomaly of the esophagus, but the behavior of a baby with such congenital defects; not the differential diagnosis between arteriosclerotic or diabetic gangrene, but the care of the feet in such individuals. The unselfishness and devotion of the nursing profession to the cause of humanity is indisputable. The physician then is interested in the hospital training school for nursing and he must assist the school, not only in teaching, but also with the establishment of scholarships for worthy applicants.

The relationship of the attending staff and the resident and intern groups.—If the hospital is to fulfill its primary function of treating the sick, it must also carry out its second responsibility—that of educating young men and women in medicine. It is impossible for medical schools to train the young physician so completely that he may go from the classroom to the bedside and properly care for those who are afflicted. Medicine has become too complex for this. The training of the recent graduate must be completed in a recognized hospital. This, then, makes every approved hospital a part of our system of medical education. In turn, every member of the hospital staff must assume the responsibility of doing his part in the training of young men and women for careers in medicine. He thus becomes a medical teacher. The day when a patient was admitted to a hospital, treated and discharged, is properly of historical interest only. In the first place, such a procedure is impossible now because of all the modern diagnostic tests which are available and often necessary to make the diagnosis, and which require the aid of the inside staff. In the second place, the complicated treatment which is often required to effectuate a cure is dependent in great measure upon the cooperation of interns and residents. The staff member must not permit a patient to pass through the hospital without instructing his assistants as to the medical problem at hand. To do so is not only dereliction, it is a violation of his obligation to the hospital staff society.

When he becomes a member of the staff, he admittedly accepts the responsibility of teaching interns and residents the fundamentals of medicine. The role of teacher must be assumed by the men in general practice, as well as by those who are in special fields of medicine. *In fact, the general practitioner is the synthesizing agent who, so to speak, integrates the various courses which the intern has studied, and demonstrates their practical application.* More and more the pendulum is swinging away from the irrational overspecialization trend of medicine and back to the rational main divisions of medicine and surgery. The interns should have a reward for good service. They should be given the opportunity for further instruction in general practice or other specialties, should they desire them. For this reason, as well as for the completeness of the service to the patient, residencies in the various specialties must be established. In addition to their help in caring for patients, residents act as liaison officers between the attending physician and the intern staff.

TRAINING PROGRAM

The hospital must have a well-defined training program for its interns and residents, including a free or rotating residency in general practice. The latter would permit the resident to allocate his time in the services he desired. In addition, all residents should be rotated through the department of pathology for a period of at least three to six months. Lectures in basic sciences must be available. There should also be weekly instruction in pathology, radiology, anesthesiology; also, clinical lectures and clinicopathological conferences should be given; and lastly, there must be some provision for practical instruction at the bedside. In general, the teaching program is that of an apprenticeship, with the added advantage of study in the allied specialties, and with the availability of instruction in the basic sciences. This program properly carried out will enable the resident to qualify himself for any of the specialties as well as for the general practice of medicine. Moreover, a comprehensive course of study as outlined will integrate pertinent laboratory and pathological data in diagnosis and treatment. The formal instruction as given in the hospital may be divided as follows:

(1) One meeting per week of one hour in radiology, devoted to a discussion of illustrative x-ray films, coupled with the patient's history and final diagnosis. All interns and residents are required to attend.

(2) One meeting per week of one hour in pathology. Attendance is required of all interns and residents. There is a discussion of clinical findings in the light of gross and microscopic pathology from operative and postmortem specimens.

(3) One meeting per week of one hour in anesthesiology. Attendance is required of all interns and residents. The hour is devoted to discussions and demonstrations of various types of anesthesia, including general anesthesia, intravenous, anesthesia, spinal and nerve block; also a discussion of the physiology of respiration and uses of oxygen, pre- and postoperatively, anesthetic complications, et cetera. Perhaps the most potent drugs administered in the hospital and the ones that may be followed by the most dire results if improperly given are the anesthetic agents.

(4) Residents are required to attend meetings of their particular sections. These are usually conducted by the director of medical or surgical education. If more than one hospital is present in a community, the resident training program may include residents in the particular specialty from other hospitals and their meetings may be rotated so that through a combination of efforts there will be a minimum of duplication.

(5) A monthly conference is held for the entire medical staff at which all residents and interns are required to be present. At this meeting the following outline is followed: (a) problems concerning administration and staff matters, (b) report of one of the interns and/or residents, summarizing the month's work in the various courses of instruction. The summary is brief and may be discussed by the staff, (c) discussion of case reports which include a resumé of the case as read by the intern, x-ray and laboratory data as interpreted by the radiologist and/or pathologist, discussion by the attending physician and the designated discussants, and a general discussion by the staff.

(6) Research work. Residents are required to engage in clinical research and perhaps later in experimental and animal research if they desire. At least one paper per year should be written on the subject which he may choose. The study will be done with the cooperation of the active staff in his department.

(7) Basic sciences. A course in basic sciences must be made available to the resident. This does not necessarily imply that the basic science course must be taught in the medical school. It may well be taught within the hospital. Lectures in physiology and demonstrations in anatomy, biochemistry, pathology, bacteriology, should be integrated in the work of the teaching as it goes on, and in addition special lectures may be incorporated from the various departments. In other words, it has become increasingly apparent that basic sciences are best taught when properly applied, although it is also well known that such basic training must be practical and must be properly supervised. For this reason, in anatomy for example, a cadaver can be made available or the demonstrations in anatomy may be combined with postmortem examinations.

Some physicians have thought that the resident and intern training program is costing the hospital too much. It must be obvious that interns and residents are not for sale and that they cannot be purchased for money on the open market.

Interns and residents want training and it must logically follow that the better the training program, the less will be the cost of maintaining the resident and intern staff. To state this differently, the cost to the patient is inversely proportionate to the excellence of the training program. The fact that this program is succeeding is obvious by the large number of applicants for internships and residencies in all hospitals which have been approved. Those who state that the increasing cost of medical care is due to the hospital's educational program must recall that the completeness of the diagnosis and treatment that the patient receives in the hospital far offsets the small price that he is compelled to pay for this additional service. In fact, this is a very, very small part of the total cost of hospital care. However, regardless of the cost, it must be obvious that a large or small hospital cannot fulfill its functions without a properly organized training course for residents and interns.

The department of pathology.—The department of pathology is a consulting service which is absolutely indispensable to the hospital. If a full time pathologist cannot be obtained, then a visiting pathologist is necessary. Residencies in the department of pathology are to be desired, but should they not be available, then residents in other services must be circulated through this department so that they may receive their basic training in pathology as clinically applied. The diagnosis and treatment of disease is so dependent on the pathologist that one cannot conceive a modern hospital functioning efficiently without this department. One last and important point; the department may act not only as an instructive force for the interns and residents, but for the staff as well.

The x-ray department.—The x-ray department may be directed by a full time member or by visiting physicians. It should be thoroughly equipped and should be available to the staff. The roentgenologist is a consultant who may contribute much in the diagnosis and treatment of disease. Like the pathologist, he should see the patient clinically as well as in his own department.

The anesthesiology department.—A department of anesthesiology has assumed great importance because of the number of anesthetics that are administered within the course of a year in a small hospital. Preparation for the anesthetic, the type selected, preoperative medication, and even postoperative supervision, are all within his province. Furthermore, it behooves the hospital to seek ways and means for training young men and women as anesthetists. Unfortunately, at present, this specialty has not attracted many physicians and therefore it has become necessary that we educate nurses in the techniques of anesthesia. Perhaps the various types of anesthesia and the large number of anesthetics given will attract residents in this department, so that it may be added to the training program. Ultimately, the specialty will receive the recognition that it deserves; however, until this time comes, it must be apparent that anesthetics will have to be administered by well-trained nurses under the supervision of the physician.

In reviewing the first objective of the hospital, namely, the care of the sick, we have seen that adequate nursing care, competent resident and intern staff, efficient pathology and x-ray departments, as well as the anesthesia department, are necessary. In addition, we have shown that the hospital must fulfill its second objective, namely, that of a teaching center. Therefore, the modern hospital must become a teaching hospital. The teaching must not only be available to interns and residents, but to the entire staff, and in addition, it must be made available for continuing instruction and postgraduate training by visiting members from other towns and cities, so that it is indeed the center, so to speak, of medical education in the county in which it is situated. Around the hospital revolves the continuing inspiration for improvement of the scientific acumen of the practicing physician, as well as for the resident and intern group.

RESEARCH

The third function of the hospital is the pursuance of research. This is intimately related to its teaching program and its ability to render better service to sick people. Research in medicine is variously defined and some have even had an erroneous idea concerning what the term embodies. In its broadest sense it implies a continuous search for the cause and cure of disease. Every physician becomes a research worker when he secures a careful history and delves into the possible causes of the malady he is treating. When, in addition, he evaluates his treatment scientifically and continues to observe the results of his methods after the patient leaves the hospital, he is doing research in the highest and most practical sense.

Investigation of a practical nature may be done every day by clinicians, residents and interns in the outpatient department. This department is, of course, absolutely necessary for teaching and for compliance with the training program for residents and interns. But most important, it offers the means of rendering better service to our patients. When each patient who is admitted to a hospital goes through an outpatient department, first for careful examination, and then returns to this department for follow-up study, clinicians, residents and interns will be able to follow the case through from start to finish. In this way symptoms and signs may be correlated and catalogued so that diagnoses may become more accurate. Follow-up studies will show the effects of treatment and will help evaluate and add to present methods of handling the sick. In between these two observations is the study of the patient in the hospital where he is watched for the imme-

diate effects of the treatment. Obviously, a careful record or chart must be kept if clinical research of the highest order is achieved. It is highly desirable that the residents be required to write a thesis pertaining to some original research project for the fulfillment of their training requirements. This research will not only benefit the resident, but the attending staff as well; moreover, it will ultimately result in better diagnosis and treatment.

The Various Committees of the Hospital.—In order to facilitate the scientific program of the hospital it is necessary that various members of the staff society be delegated to supervise each division of the organization. This is best accomplished by the appointment of committees. The intern and resident, records, library, program, nursing, laboratory, anesthesia, research, and professional standards committees, all play an important and integral part in the staff organization. They make for a better staff and a better scientific approach to the various functions of the staff. Each of these committees must function continuously and have meetings at various intervals to facilitate its particular project. The Professional Standards Committee is one of the most important. It has been well said that organizations function best when they are their own severest critics. The Professional Standards Committee is not set up to criticize its members. It is an advisory committee designed to consider ethical, moral, as well as scientific attainments of its staff members. On this committee should be representatives of the various departments, the head anesthetist, the pathologist, and perhaps one or two others who will listen to criticism, but whose chief function will be in an advisory capacity. It must be given the power of criticism should this become necessary, but by the same token, it must also have the power to praise and reward its members for meritorious service.

The future of the private hospital.—A hospital lives and, like the human, has a body and spirit. It is not known primarily because of its body. Admittedly, it is desirable that the hospital buildings are ample in size and adequately equipped. Over and above these physical attributes, however, is the spirit which governs the behavior of the men and women comprising its staff. It is the high standard of work that is done which gives the hospital its reputation, rather than the appearance of its buildings. The future of the private hospital is secure because it has a vital function. An organization cannot fail when it has for its purpose noble goals which benefit the community in which it is placed. We have heard threats about the socialization of medicine and the regimentation of the hospitals of the nation. What we do or say may not stem the tidal wave of social security which seems to be sweeping the world today. We do not desire this in medicine nor do we seek it, but should it come, the survival of the private hospital will depend upon the fulfillment of its three avowed objectives: namely, to care for sick people, to educate young men and women for the practice of medicine, and to chart the unexplored fields of medicine through research so that new and better methods of diagnosis and treatment may evolve.

THE FAMILY DOCTOR

When I leave Indianapolis there is one man whose kindness and help I shall sorely miss—our doctor. I went to him six years ago, a stranger, and during the intervening years my family and I have been under his care, he has become a real friend.

On one of my recent weekly visits to his office I gazed at the familiar sign which reads, "I am the doctor who did not go to war." A tender smile tugged at my lips as my eyes rested on his silver hair. I recalled vividly the tremendous load he carried throughout the war, never sparing himself. During those hard-pressed years he never once failed to come to Mary Ann when I called, always quieting my fears, imparting strength and courage by his mere presence. . . . One night in particular comes to mind. I sat by Bob's bed at midnight, alone and afraid. While the illness of a child is frightening, to see a strong man lying helpless is doubly so. I thought the good doctor had forgotten me, when suddenly the door opened and he stepped inside. Never have I seen such utter weariness engraved on a human face, yet he smiled and said, "Well, I made it." In sheer gratitude I wanted to clasp him in my arms, but, of course, one doesn't do such things. . . .

In this modern age of specialists one hears the cry for more of the old type "family physician." This man is truly our "family physician." When it is necessary to call him he takes time to tease Mary Ann, pat Laddie, inquire of my health, and discuss Bob's work with him. . . . Because these things lie so close to my heart I cannot bring myself to speak of them when I tell our doctor good-by. I would like to take this means of paying tribute to this man, who has proved himself repeatedly not only a fine doctor, but a wonderful friend as well.—Carter Vaughn in *The Indianapolis News.*

THE PRESERVATION OF GENERAL PRACTICE*

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THE theme of this paper is that we must suffer state control of medicine unless we can rescue general practice from the dangers which threaten it.

Overspecialization has become the greatest threat to general practice. At the end of the last century ophthalmology and general surgery were the only well-established specialties. The men in these specialties were few, and nearly all of them had been general practitioners. By 1944 30 percent of all physicians were specialists. If the present program for training more and more of them is not stopped, they will soon outnumber the general practitioners. A questionnaire issued recently by the American Medical Association enumerated 30 specialties. The narrowness of some of these is astonishing. One writer actually suggests that the surgeon specialize on only one operation! We have specialties within specialties. Overlapping of specialties causes bitter disputes over the possession of clinical material—comparable to the jurisdictional disputes of labor unions.

Many powerful institutions promote specialization. Chief of these are the medical schools, medical departments of Army and Navy, the Veterans Administration, hospitals, and foundations for medical purposes. The conceptions back of this support are well stated in the following sentence in the last report on the Rockefeller Foundation by its president, R. B. Fosdick: "Increasing attention is being given to arrangements whereby physicians may make available to their patients all the benefits of an art which is so complex that no single practitioner can master it all or keep up with its rapid progress."

This sentence and its context show that President Fosdick has three conceptions:

1. The magnitude of medical knowledge makes specialization necessary.
2. Only groups of specialists can give good medical care.
3. General practice is inefficient, outmoded, and should be abolished.

Since these ideas are widely held by both physicians and laymen in positions of authority, and since they involve the very existence of general practice, I shall discuss them in detail.

The first proposition is the sole valid justification for specialization, but it is a half truth. It is true that no one can learn all medical knowledge now existing or master all the technical skills necessary to apply it. The catch in this proposition is in the phrase "all medical knowledge." Does this mean all the facts of anatomy, physiology, pharmacology, biology, sociology, physics, etc., directly or indirectly related to medical care, or does it mean the knowledge at present available and found by experience to be directly useful in medical care? Should we accept the first meaning—as many medical educators and writers on medical education seem to do—and should we attempt to apply it to medical education, we could never train a single physician. This undertaking would be about as sensible as to require every driver of an automobile to learn all the chemistry, physics, and mathematics used in its manufacture and operation.

If we accept the second meaning, it is entirely feasible to give the student a sufficient understanding of the subject. Despite all the progress we have made in the prevention and treatment of disease, the care of the sick remains, and will always remain, more of an art than a science. The proof of this is that more than half the complaints which bring patients to a physician are imaginary, and that a great deal of organic disease has a psychic cause. Writers who hold the same opinions as President Fosdick do not seem to understand that the progress of knowledge facilitates understanding; that the treatment of disease is made easier by the discovery of specific remedies; that adding more courses to the curriculum is not the only way to "improve" medical education.

The second proposition, that only groups of specialists can give good medical care, is plainly false. As I have stated elsewhere, the cult of specialization is fostered by the idea that every patient should have a complete study by specialists, which should include all laboratory examinations they deem desirable. The general acceptance of this dogma by physicians and laymen is the chief menace to the existence of general practice, and the chief reason for the high cost of medical care. Self-constituted authorities, who have had no personal experience with care of the sick, promulgate it as indisputable truth. Our efforts to refute it have been feeble, though it is the very heart of the argument for socialized medicine.

The services of specialists are indispensable to a limited part of medical care, but total medical care by them would be terrible. The present training of the specialist is likely to make him overestimate the importance of abnormalities he discovers in the portion of the patient which he examines, to make him unable to understand that the treatment of these should be determined by its probable effect on the whole patient. Very few specialists or groups of specialists have the

* Read May 19, 1948, at Indianapolis, before a joint meeting of the American Academy of General Practice and the Indiana Board of General Practice.

broad clinical wisdom, possessed by a good family doctor, necessary to make this decision. It is remarkable that writers who advocate medical care by specialists never discuss the disastrous mental and physical results of much of it.

Too much specialization causes too much laboratory work. Generally speaking, 70 percent of a diagnosis depends upon the clinical history, 20 percent upon general examination, and 10 percent upon the laboratory findings. The more competent the clinician, the less laboratory work he will need. He will order none of it until he has exhausted all other means of making a diagnosis. He will thus make a better and earlier diagnosis and will save his patient much expense.

The third proposition deducted from President Fosdick's statement, that general practice is outmoded and should be abolished, is a corollary of the other two. It is without doubt taken for granted by many writers on medical care, by many public health officials, and by many teachers in our medical schools. The latter, perhaps without the deliberate attempt to do so, have done almost everything they could to exalt specialization and discredit general practice.

Laymen now control most of medical education. In five of the seven years which the student must spend to get his degree, he is taught almost entirely by laymen. Some of our medical schools actually have deans who are not physicians. Much of the scientific knowledge presented by these lay teachers is of little or no use in clinical practice. In the last two years of his course the student is taught by medical specialists, each of whom emphasizes the importance of his specialty and of the techniques required to apply it. The student also sees much laboratory work done on every patient. He has inadequate teaching on the correlation and evaluation of clinical data for purposes of diagnosis and treatment. His instructors give him the idea—usually by implication, sometimes even by direct statement—that the general practitioner is a poor kind of doctor who is not bright enough or ambitious enough to pass a national board examination to become a specialist. His ambition to be a specialist is strengthened also by thoughts of the greater income, easier life, and greater honor which the specialist enjoys.

Medical education has not been overhauled since 1908. It has lost sight of its primary purpose, which is to turn out competent physicians. The medical student should be in contact with patients and clinicians throughout his entire course. By this method he will master more pure scientific knowledge than he does at present, because he will see the application of it. He will also acquire the broad clinical experience necessary to a mastery of the art of treating the sick.

Overspecialization is the chief cause of faulty distribution of physicians, of the high cost of medical care, of unnecessary use of hospitals and of much unsatisfactory treatment. Our state and national organizations are at last awakening to its dangers, though they have as yet done little to curb it. This could be accomplished by making three years of general practice one of the requirements for specialization. This used to be the custom. It would go far toward limiting the number and improving the work of specialists.

Our national boards apparently regard the demand for specialists as unlimited. Their policy, founded on this idea, encourages the advocates of state medicine. The latter would seem to imagine a future in which medical care in community and regional hospitals will be given by groups of specialists; medical care in the home by visiting nurses, and in which the social relationships and family lives of the people will be managed by social and welfare workers. The general practitioner has no place in this vision.

Overspecialization is the greatest but not the only danger to general practice. Lay activity in the field of medical care is another. It is widespread. It is attempting to do work which the family doctor can do much better. One part of it is the lay campaigns to "control" diseases—poliomyelitis, cancer, birth. The use of the methods of commerce in these drives is bad. The attempt of their promoters to inform the public, including even school children, on the grim facts of disease is dangerous, is making us a nation of hypochondriacs and is creating much psychosomatic disease. These people seem not to know that scientific discoveries and good medical care cannot be had for money alone.

Many troubles of general practitioners are due to faults of their own. The chief of these is laziness. This makes them fail to make diagnoses they should be able to make, and to give treatments they ought to give. It makes them neglect to read medical journals and to do postgraduate study. It makes many of them mere directors of patients to specialists. No wonder patients so treated by their family doctor by-pass him, and go directly to the specialist.

Is general practice doomed? I do not think so. The dangers which threaten it are probably temporary—the result of the recent wars and of the foolishness always present in boom times. Most of them will not survive a business depression.

The immense cost of state medicine (witness the cost of veterans hospitals) and the difficulties of its management will make our politicians hesitate to establish it.

Ages of experience have adapted general practice to the needs of human nature. No specialist nor no group of specialists can successfully compete with an industrious, competent and generous family doctor. I emphasize the importance of generosity. The public expects a physician to show it. We have, of late years, heard more of the business side of medicine than is good for us. Medicine should be practiced as a learned profession and not as a trade. The physician who makes a friend of every patient need not worry about his income.

General practitioners are beginning to be a little less subservient to specialists. They are at last realizing the dangers which confront them and are uniting for self-defense. This action is in the interest of the public and of the entire medical profession, specialists included. State medicine would be inevitable were general practice destroyed. Then every physician would be a hireling of the state, whose professional life would depend on the vicissitudes of politics. The idea that this would give the people good medical care is a dangerous delusion.

ADVANTAGES AND DISADVANTAGES OF GENERAL PRACTICE IN A LARGE CITY

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GENERAL practitioners in a large city have distinct advantages over their rural and small town colleagues in several ways:

(1) Extensive hospital facilities, private and municipal.

(2) Clinical and x-ray laboratories, well equipped and staffed, and quickly accessible.

(3) Special professional consultation facilities of a wide range of skilled consultants.

(4) Educational facilities available through large medical society wide-range programs, hospital staff meetings, clinics and medical conventions.

The urban hospital is a unit of diversified medical aids, viz: physical facilities with rooms and wards of varying economic levels; skilled floor and special nursing services; staff personnel of recognized ability available for a wide-range of consultation needs; x-ray and clinical laboratory services, physiotherapeutic aids, modern surgery and anesthesia facilities.

For ambulatory and home patients, clinical laboratory aids in hematology, serology, bacteriology, urinalysis, electrocardiography are readily available and add much to the general practitioner's efficiency in diagnosis and therapeutics. Genuinely competent, well-trained specialists in all well-defined specialties are available for needed help in office, hospital, outpatient services and homes.

The general practitioner in a large city has unlimited opportunities to attend interesting and practical programs sponsored by the local county society and hospital staff societies. The libraries of the hospitals afford adequate sources of information from recognized texts and journals. Special meetings, with outstanding speakers, local and national, and conventions add to the facilities for keeping abreast of current medical knowledge.

Everything in a large-city general practice is not a Utopian "setup." The present-day standardized hospital imposes various restrictions and compulsions upon its staff members. Meetings and attendance records have assumed serious proportions in the way of demands upon the time of physicians. These requirements are particularly difficult to meet by the general practitioner, surgeon and obstetricion, who, in a large degree, cannot work by schedule or appointment. The compliance with hospital chart and record requirements, and insurance and industrial claims, are likewise factors which absorb considerable time from the busy practitioner's working hours.

The hospital expansion program in smaller cities and towns is reducing considerably the previous advantage of the large city practitioner. The lay public is medically conscious and hospital minded. They are sold on "scientific medicine" and existing hospital facilities cannot begin to supply their demands as regards bed space and professional service.

Large hospital centers, staffed by recognized consultants, serve many laymen. Laymen are impulsive when their medical needs seem urgent to them. An apparent specific disorder impels them to by-pass the "family or general doctor" and seek the advice of a "specialist" for a disorder which they themselves have catalogued. Hence, it happens that patients refer to "our dermatologist" and a transient patient may call a general practitioner and ask to be referred to a "rheumatologist." Hence, super-specialism holds sway in some cases and trivial illnesses are magnified by the "well-informed laity" into disorders which are amplified by unnecessary diagnostic studies and resulting increased cost in medical care.

Laboratory studies are invaluable in selected cases but are often highly uninformative without prior case-history analysis and adequate physical examination. The overall ratio of 50-40-10—case history, physical examination, laboratory aid—seems to be a logical summary, with certain exceptions that do not depreciate the rule. The general practitioner can ill afford to discard a laboratory record which may in the future prove to be of distinct value in the appraisal of a patient or the saving to the patient of further unnecessary laboratory repetition.

Specialized consultation is a valuable adjunct to the general practitioner. However, specialization by the connotation of the term is very apt to be limited in its perspective and may lead to unneces-

sary elaborate studies along a limited channel. The general practitioner may have observed a patient over a period of time of varying length, and during this time may have ascertained the personal eccentricities of the patient, the familial-socio-economic background, essential physical examination and laboratory studies, which may have given a picture relatively en toto of the needs of the particular patient. The specialist cannot possibly ascertain these ramifications of the patient's medical problem and may unnecessarily repeat studies at great loss of time, expense and confusion to the family physician.

Educational facilities are unlimited but the time for decision for the immediate needs of the patient and the inavailability of the physician who pursues excessive study rests on the practicalities of service versus medical scholarship.

In this age of rapid communication, exact science and good medical care for all the people, the status of the general practitioner in a large medical center is unenviable because the practitioner is on the horns of a dilemma, viz: sufficient knowledge for the proper care of the sick vs. technical scientific knowledge, which can only be attained by study —a study program which by and large precludes the possibility of applying advanced medical knowledge to the needs of great numbers of people.

ADVANTAGES AND DISADVANTAGES OF GENERAL PRACTICE IN A RURAL AREA

James B. Maple, M.D.

SULLIVAN

I HAVE a grandson, whose father is also a physician, who will soon be ready to plan for medical school. What shall we advise him? Should he, like we, be a general practitioner? Or shall we have him trained for the specialties?

What is wrong with the general practice of medicine, anyway? What are its bad points? Is it profitable? Is it a pleasant, satisfying business? How is it conducted today? Am I glad I have spent my life in general practice?

The loudest outcry is that it is a twenty-four-hour-a-day business; that there are no eight-hour shifts, no days off, and few vacations. The answer to that is, it all depends upon the physician, himself. He can adjust his hours to a fair degree. He can limit his office hours and can take one entire day a week off. Night office hours can be limited and he can close his office entirely on two or three nights. Some physicians even have no night hours. These things depend also upon whether a physician practices in a large or a small town. Emergencies and obstetrics know no hours and the general practitioner will often have to give up his hours of rest.

Vacations are becoming more and more an annual affair with most physicians and our patients expect them and can easily be cared for by a fellow practitioner. With office help, receptionists, nurses and technicians, one or more of which we all have nowadays, much of our routine work can be carried on by them and our offices kept open all the time we are away. Since records of all cases are kept in the office files, it is very easy for a nurse to carry on much of the work for the short time one is away. It is really surprising how much of one's work apparently stops until one returns.

The question of financial returns to the general practitioner is one in which it is often inferred that the general practitioner is the poor relation of the medical family. That used to be the case, but the general practitioner has now grown up to see his opportunities, and most of those who are not in the crowded cities are making incomes that compare more than favorably with those of the specialist.

With the income tax law requiring a closer supervision of the financial part of general practice the attitude of the physician towards his business has undergone considerable change. In former years he was inclined to put his fee in his pocket and feel that he had made that much money. Now he knows better. He knows, or at least his bookkeeper knows, that his dollar has to cover the cost of drugs, equipment, office overhead and taxes, before he can call any of it his own. It is surprising how small a part of this dollar turns out to be profit. It will also surprise the physician when he analyzes his various charges and transactions to find that he often loses money on some of them. There are some things that the general practitioner can do on which he can make a profit and some he had better let alone. The quicker he learns this, the better for his business.

The cash we receive has risen with the years. When I began to practice we ran about 40 percent of our gross as cash. Today, and it has been so for several years past, we expect to collect 90 percent or better cash against gross, and the young practitioner starting out can expect to do about as well as the older man if he is careful in keeping his accounts active.

Country calls have, in times past, been a real

source of grief for the general practitioner. Today this is really a minor factor for most of us. Where there is a hospital located in the county, the really sick are speedily brought in there for care. Those less ill are brought to our offices by auto for care and then returned home. With closed and heated cars it is surprising how few cases we really need to drive out to see.

In localities where there is no local hospital the burden of visits, both town and county, is greatly increased, so much so that men so situated often drive fifty thousand miles or more per year making those calls. In bad weather, and in communities where there are still many bad roads, this is often a hard and disagreeable task. This can be lessened by the physician's employing a driver who is physically strong and able to help when one hits a mud hole, and who can open gates, change tires and drive when the physician is tired and needs to catch a bit of sleep while on the road.

One of the things that often deters younger men is the fact that they are very much alone and "on their own." This is not so true now as it was formerly. There is an increasing tendency for general practitioners to group together. There may be several in the same office or in the same building. And there is a tendency for men to work together even when they occupy separate office buildings. This is a good thing, both for the physician and the patient. It makes for better work, keeps a physician up on his toes, keeps him studying and informed, and at the same time divides the responsibilities that beset him. General practitioners so situated may even divide the types of work they do so that one man may emphasize one phase of medical practice and another may emphasize some other phase. Men so grouped may refer some types of practice to another general practitioner in his group. This is the practice in the community where I live.

In the matter of offices and equipment most small town general practitioners are really much better off than their specialist friends. The specialist makes use of the facilities of his hospital; the general practitioner may do that, too, but he also can have much larger office space and he has far more equipment of his own. A general practitioner in a town of from 1,500 to 5,000 population, and sometimes even smaller, will have an x-ray outfit, good examining tables, and all the minor equipment needed for a physical examination. In addition, many will have a basal metabolism machine, an electrocardiograph, quartz lights, heat lamps, short wave machines, et cetera. If two or three are grouped together they may also have a joint laboratory and laboratory technician to do their work. The pay for each laboratory examination goes to support the laboratory and technician's pay.

In the matter of help, the average office will have from one to three lay helpers, sometimes four. These usually consist of a receptionist, who also answers all telephone calls and tries to divert as many as she can to keep from bothering the physician who is called. Then there is a nurse, or a practical trained assistant, who helps with the patients and with preparation of prescriptions. There is also a laboratory technician and, if there is much book work, there may be a bookkeeper, in addition. All these functions may be performed by one helper if there is not too much work, but with the number of patients going into physicians' offices nowadays one helper is unable to do all that is required.

This may sound like a good-sized business, but that is just what the general practice of medicine has become. The shortage of physicians has created such a demand upon all of us that the beginner today can expect to treat more patients in his first year than most of us older men did after fifteen or twenty years of practice. And the older men who have remained active and kept up with modern practice are grossing far more than they ever dreamed possible when they began the practice of medicine.

In my county the general practitioners supply the medicine required for the care of their patients. The cost of these supplies is no small item, running from four to seven thousand dollars a year for most of us. In order to care for this in the most economical manner we have what we call a buying group, and one of our men buys for a considerable number of physicians. This means buying in large amounts and results in better prices and discounts, so that a savings of no small sum may be made this way. This buying covers drugs, bottles and various supplies used in amounts sufficient to justify special prices.

It has been said that the general practitioner is a sort of clearing house for patients on the road to specialists. I think this is a misconception of the true situation. In the first place, the percentage of patients referred to a specialist is small and for the most part falls into a few groups. We refer eye cases, of course; that is proper and humane. We refer cases for radium and deep x-ray therapy. We refer skin diseases to the dermatologist. We refer our mental cases to the neuropsychiatrist. And sometimes when we have exhausted every check at our command and still are unable to get at the bottom of the case, we send him to a good internist or some clinic group for study. But in the course of a year the percentage of cases so referred is very small. The general practitioner soon learns the most competent men to whom to refer cases, and usually continues to use them, to the advantage of both the patient and general practitioner.

The general practitioner has been accused of not keeping up with the progress of medicine. It is true that there are some who stop learning the day they graduate, but most general practitioners nowadays are kept well-informed as to the progress of medicine. This is done by attending various medical or special meetings, such as are

offered by the Indiana Board of General Practice of Medicine, or refresher courses given by medical schools and hospitals, and chiefly by reading the various medical magazines which cover all the different phases of medical practice. And, last but not least, the various house organs seek to keep us informed on every new development of medical treatment. So it is that the general practitioner has the opportunity to keep abreast of his fellows everywhere.

It must be admitted that in spite of all of the advances in the methods used by the general practitioner, there are still many techniques and many treatments that are beyond his equipment and ability. These things belong to the hospital centers where equipment and training are such that they can be successfully used. The general practitioner should recognize his own limitations and when these special techniques are indicated he should send his patient where such things can be done. It is only required of the general practitioner that he have the ability to recognize these unusual cases and have the upright courage to send his patient to that physician, clinic or hospital that can do the difficult things required to diagnose and treat him.

There may be a limitation to the general practitioner's facilities to do things but there is no limitation to his opportunity to study and increase his general knowledge of disease and its treatment. And it is this general knowledge of all phases of disease that is the distinctive feature of the general practitioner.

There are many inconveniences connected with the general practice of medicine, one of which is being on constant call, day and night. The telephone often rings three or four times to interrupt your dinner hour. It is hard to separate your home life and your business life. It is hard to train patients not to call at your home, so that you do not have any regular home life. You find it hard to plan any social life because you can never be sure you will be free when the time comes. Someone gets hurt, or has a hemorrhage, or a pain in the lower right quadrant, or some baby arrives ahead of schedule, and you have to excuse yourself and hurry away. A physician's wife has to be a very brave, tolerant woman to accept all of the disappointments life with such a husband entails.

In spite of all that may be said against it, I still want my grandson to be a general practitioner. It is a useful, worth-while life, a life of service to others at a time when such service means much, when it means relief from pain and anxiety, when it brings comfort and courage and new hope to the discouraged and sick, a service that is reverent and consoling in the last days, and equally as cheering and joyous when a new life comes crying into this vale of tears. It is a service that means sacrificing many of life's pleasures, but it is a service that makes one's life worthy of that final commendation: "Well done, thou good and faithful servant."

MEDICAL ECONOMICS—A PERSONAL PROBLEM OF PATIENT AND PHYSICIAN

J. C. Rhea, M.D.

BEECH GROVE

WHEN people are injured or become ill, they seek the services of a doctor. The doctor, like all other human beings, is poor, mediocre, average, or good, and the patient is reasonable, distraught, or unreasonable. Good medical care rests upon the practical relationship of patient and doctor.

In the present era of applied science to the welfare of human beings, the general practitioner is in a broad sense a "Clinic Director." The term "clinic" has a variously implied meaning, even by definition from authoritative sources, e. g.,

(1) Medical—of or pertaining to the sick-bed and specifically to that of indoor hospital patients (Oxford University—English Dictionary).

(2) Medical—an institution that offers diagnostic, therapeutic or preventive treatment to ambulatory patients (Encyclopedia Brittanica).

The above definitions are at variance but a good general practitioner is a logical equivalent to both in their fundamentals—the care of the ambulatory sick or bed-ridden.

The general practitioner is truly a "clinical director," in that he usually sees the patient in his immediate problem of distress and from there on must guide diagnosis and treatment to a practical end, when possible. In curable maladies, he must seek the best help that can be found, and in incurable states, he must provide what relief he has at his disposal. His duties, if honestly appraised, are as simple as cure, help or relief. The patient, under economic duress, needs more. What can he honestly do financially to secure such for himself or family?

Here again the general practitioner assumes the role of "clinic director." He may cure, alleviate or help the case himself. The patient's needs may transcend the general practitioner's facilities or abilities and then "he must direct the clinic" by good judgment and an insight into the integrity and ability of his more specifically trained colleagues, select skilled help in the realm of the specialist. Yet all of this procedure is costly.

Who is more capable of deciding the needs and the ability to pay than the general practitioner? The general practitioner can present the medical problem, medical needs, approximate cost, exceptional or unpredicted costs, and equalization of such costs through understanding with his conferees. Whether it be one consultation or multiple consultations, the general practitioner can still direct good medical care with the maximum of good medical consultative talent to the best medical and economic advantage of the patient.

Most of the grievances of medical practice and wholesome public relationship evolve about the minimization of the competency of the general practitioner and the seemingly superior value of the specialist. The concepts of the laity are distorted to the deteriment of the entire profession.

A patient needs medical care adequate to his needs by a doctor thoroughly informed of them, and as to the special medical and surgical skill whereby they may be fulfilled. The discrepancy between individual patient-doctor relationship has been no more thoroughly upset than by the glorification of surgery. The stakes of surgery, the recognition and diagnosis of purely medical conditions of many sick people, and particularly the average patient, are amazingly underestimated.

The competent general practitioner can meet a patient in need of good medical care, he can appraise his simple medical needs, or advise special treatment, and he can likewise direct the proper financing of such care.

INTERNAL MEDICINE IN A RURAL AREA

Dan L. Urschel, M.D.

MENTONE

THE problem of rural medical care is becoming increasingly acute, with constant shifting of doctors from small towns to cities, and with the reluctance of young graduates to settle in rural areas. Much organized effort is being expended on the latter phase of this problem, with scholarships for medical education given with the stipulation that the recipient practice for a certain number of years in a small town, with direct financial aid to doctors starting practice in small communities, and by numerous other methods. Less attention has been paid to the first phase, and it is with one aspect of this problem that this paper is concerned.

In most instances the shift of established physicians is for one major reason, the desire to specialize. The reasons for this desire are manifold: the hard work of general practice, recent emphasis on specialization and the value of specialty board certification, the living advantages that the large city provides, and a wish to escape the professional isolation peculiar to the small town. Each issue of *The Journal of the American Medical Association* contains advertisements for practices being sold because the owner desires to specialize. These invariably list a financially profitable practice, and it is obvious that professional failure is not the reason for the change. For each practice so advertised for sale there must be dozens or even hundreds of others given up for the same purpose. Usually these men will not go back to their small communities after they have attained their specialty education. The reasons for this have been listed in part above, and to these factors must be added the potent one that most of these physicians do not feel that they can practice a specialty in a small town.

Since 1942 I have practiced the specialty of internal medicine in a northern Indiana country town of 700. When talking to other physicians I have become accustomed to having this statement met with incredulous looks, and many questions. Inasmuch as these questions follow a now-familiar pattern, I will assume that the reader is already asking them, and continue the paper in the form of a question and answer discussion.

Question: "What did you say that population was?"

Answer: "700."

Q. "Are there any other doctors in the town?"

A. "Two general practitioners, one doing only office practice."

Q. "Is there a populous surrounding territory?"

A. "The county in which I live has a population of 30,000 and, with the three surrounding ones from which I draw, provides about 100,000 people as a potential practice group."

Q. "What about the average income of these people?"

A. "This is typical northern Indiana farming territory. The land is good, and the farming diversified, so that there is a steady source of income."

Q. "Do you have a hospital in your town?"

A. "No, but there are three within a radius of twelve miles. Each of these has a capacity of 25 to 40 beds, and are as well equipped as the average hospital of their size."

Q. "Are there any other internists in this vicinity?"

A. "The nearest ones are located 50 to 60 miles away, in towns such as Fort Wayne and South Bend."

Q. "What about other specialties in nearby small towns?"

A. "One town of 3,000 has two men who limit their work to eye, ear, nose, and throat. Our county seat, with a population of 7,000, has one man in that specialty, and another who limits his practice chiefly to pediatrics. In another of the county seat towns two men do only general surgery."

Q. "Do the general practitioners support you with referred work?"

A. "This was one source of concern to me, inasmuch as I practiced here as a general practitioner for some

time before specializing. I have been agreeably surprised by the volume of referred work which I have had, both before and since my service in the Army."

Q. "Do the patients accept the idea of a country doctor practicing a specialty?"

A. "They apparently do, if the volume of my work is any criterion. The average layman's knowledge of medical subjects has increased immeasurably in the last few years, due principally to the efforts of the American Medical Association, the large insurance companies, the pharmaceutical supply houses, et cetera. In addition, pseudo-scientific articles in lay magazines have made the layman conversant with many subjects that would have been completely foreign to him a few years ago. One such subject is specialty certification, and most of my patients are as aware of the meaning of my certificates as they would be if they lived in Indianapolis, Cleveland, or Detroit."

Q. "Can you really limit your work to your specialty?"

A. "This has been a matter of education of patients. The speed with which gossip travels in a small community may not quite equal that of the bush telegraph or the modern radio, but it isn't far behind. It was only necessary for me to state the limitations of my practice in a single issue of the local paper, and there have been few times when I have had to do any straightforward refusing. My principal interest is in cardiovascular diseases, and this has helped me to limit my work. My farmer friends may look bewildered at the mention of specializing in 'Internal medicine,' but they all realize what a 'heart specialist' knows, or should know."

Q. "Can you charge enough to justify your specialty work?"

A. "By no stretch of the imagination could this be called a high-fee area. However, I have been able to charge fees equivalent to those obtained by internists in Fort Wayne and South Bend."

Q. "Do you dispense or prescribe?"

A. "Prescribe. This has helped to emphasize the specialty nature of my practice, as all other neighboring physicians dispense."

Q. "Getting back to the fee question, how are your collections?"

A. "Good. As I stated above, this is a fine farming community, with diversified income of a nature which makes for good collections."

Q. "What about laboratory and x-ray facilities?"

A. "That is a wise question and has been a most important factor in my work here. Laboratory aids have become so vital to modern medical diagnosis that it would be inconceivable to practice the specialty of internal medicine without them. There are good clinical laboratories in Fort Wayne and South Bend, but both of these towns are sixty miles from here, and for that reason such laboratories cannot be used for routine work. For this reason I established my own laboratory several years ago, and now have two full-time technicians. We do all but the most complicated tests, and the fees charged are commensurate with our other fee schedules."

Q. "Do you do laboratory work for other doctors?"

A. "Very little, as my technicians are busy with our own work, and I have no desire to compete with the commercial laboratories."

Q. "Have you had any difficulty hiring technicians?"

A. "That is another good question. As you know, the problem of technical help is a very critical one throughout the entire country, and I have no magic formulas. In fact, there have been problems peculiar to my own situation because many people do not like to live in such small towns. However, we have always had good technicians."

Q. "Why are you practicing in such a small community?"

A. "This is the most important question of all, and the answer is, of necessity, not simple. One bit of advice which is always given to young doctors starting out in their medical career is to 'Practice where you want to live.' I grew up in a village six miles from here. After graduation from medical school I spent two years in a medical internship and residency, then settled here as a general practitioner because I knew the community, liked the people, and wanted to live here. General practice is, at best, a strenuous life. My own practice was no exception, and my decision to return to the specialty in which I had my basic training was hastened by ill health due to overwork. After gaining the desired goal, specialty certification, remaining in Mentone seemed a good idea from many points of view. I had already been limiting my work for some time, and through the medium of a special interest, brucellosis, was beginning to be known among the surrounding doctors. I owned my home and a well-equipped office, my family was well established in the community, and to get back to the basic point, I like to live here."

Q. "Are you going to stay there?"

A. "So far, nothing has arisen to make me change my mind. My practice has been satisfactory, from a financial as well as a professional point of view. The most undesirable feature has been professional isolation. At this time I can think of no other reason which might induce me to move to a larger town."

This paper was written with one object, to interest young doctors considering specialization in small communities. It is obvious that few, if any, would want to come to a town this small, but there are numerous towns such as our county seat, with a population of 5,000 to 10,000, which could support certain specialists to the profit of both the doctor and the community. Some specialties are particularly adaptable to communities of that size. As I have already mentioned, several EENT men have fine practices in nearby small towns. Pediatrics is a specialty which could be very successful in such surroundings. General surgery, likewise, may be practiced in smaller towns, but in this field a man should investigate all features of the situation carefully. (Many small towns have private hospitals, with general practitioner-surgeons owning them. This would completely freeze out competition.) I believe that obstetrics and gynecology could be very successfully practiced in towns only a little larger, in the 15,000 to 40,000 class. My own special field, internal medicine, can be practiced satisfactorily in small communities. (Even 700!)

If this short article will serve to call attention to one phase of the rural medical situation it will have justified its composition. I have proved to my own satisfaction, and to that of my neighboring colleagues and patients, that a recognized, limited specialty can be practiced in a small country community, that such specialization can be profitable, both to the doctor and to his patients, through improved medical care. Every doctor who is "leaving to specialize" should give serious consideration to returning to his home community after he has achieved his specialty education. Likewise, young men who have completed their training requirements and are looking for a place to practice their specialty will be wise to investigate smaller towns.

A COUNTRY EDITOR APPRAISES THE COUNTRY DOCTOR

EDMUND C. GORRELL *

WINAMAC

"A hick town," opines some wisecracker, "is a place where the folks call up the doctor to ask whether the new baby at the Jones's is a boy or a girl."

Hicks or not, the fact remains that the people of a country community esteem the privilege of knowing their doctor well enough to do just that, even if he has to turn from a roomful of waiting patients to answer the 'phone.

The writer, a small-towner by birth and preference, has seen a good many doctors come and go during his half-century's connection with a country newspaper. Some have come into the community as fledglings, hopeful of reaping reward for the time and money expended and the sacrifices endured, in winning the cherished "M.D." Others have come as experienced men, seeking new and different fields.

Whether they have "clicked" has depended to a large extent upon their own desire and willingness to become an integral part of the community; not that the newcomer was expected to become president of the commercial club during the first year of his practice, or become the leading tenor in a church choir, but rather that he should have that happy knack of convincing his acquaintances that he regarded himself as made of the same sort of clay as the average citizen.

It is a well-known adage that the successful small-towner must like people. Further, he must like the KIND of people with whom he has decided to associate himself. If it isn't in his natural make-up to do that, if the diagnosis shows that he is allergic to the petty thinking that marks a small but annoying percentage of the citizenship in a non-populous community, he just doesn't fit, and he will be more or less unhappy about the whole thing.

But let's get this straight: the percentage of petty thinkers in a small town is no greater than it is in a large town—perhaps less. But they are so free to converse with each other, as part of their daily living, that they sometimes seem to be more numerous. It is also true that the percentage of big thinkers is somewhat lower. Yet the average intelligence won't vary much as between "mine-run" communities of different size. Satisfaction with life is closely proportionate to the individual's ability to recognize these truths.

Cherished in memory are several pioneer country doctors who located in small Indiana communities even while the first settlers were active. As compared with today, their scientific knowledge was indeed limited. It was not uncommon to hear one admit, in confidence, that he really had nothing in his pill-bag that amounted to a whoop, except calomel, quinine and morphine.

What those early practitioners lacked in training was over-balanced by a generous supply of stamina and fortitude. Those who progressed from horseback on crooked trails to open buggies on unmaintained roads—in the days when a "pike" was something one had only heard about—were succeeded by a group who graduated from Klondike buggies to the first vintage of horseless carriages. Yet each in his own way contributed heavily toward community advancement. He might not have learned to scrub his hands before delivering a baby, it may have taxed his ingenuity to amputate the leg of a patient lying on a dining table under a dim kerosene lamp, but he learned to do the best he could with the best he had, to relieve suffering and prolong lives to the best of his ability.

It was during such days that folks learned to love and esteem the family physician. He became a factor in their very existence, right along with their religion and their politics. Parents instilled that love and esteem in their children, and they to their children. It became a natural heritage.

As a rule, people live in small cities, in towns or on farms, because they like the moderate tempo, the convenience, the quiet of that sort of life. They have much the same attitude as the little farm boy who, on returning from a visit to Chicago, said he didn't like it so well up there because "They have too much noise and not enough air."

These "country" people get sick and have accidents; they also have babies. A doctor among them is as necessary as the post office, the bank, the food markets—even more so, in numerous cases. They rather take it for granted that because there is such a need, one or more medical men will fill it, just as additional merchants and various agencies open establishments in a town as it grows and provides additional opportunities for a livelihood.

We of the country town live in a home-loving, wife-and-husband-loving, children-loving, business-loving atmosphere; a place where a neighbor's a neighbor, whether he works or plays golf, whether he be a banker or a blacksmith; where we walk a few blocks along pleasant streets to our work in the morning, and very likely home again for the noon-day meal; where we breathe air uncontaminated by that modern stuff called "smog"; where we drink water pumped from spring-fed wells, unsullied by chemicals; where we eat pure food, fresh from the farms and gardens; where most people

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own their own homes and the verdant lawns that surround them; where we have efficient local government because the officials feel responsible to the personal acquaintances who elected them.

The folks of the smaller communities do not expect their doctor to be a specialist. But they do expect him to have the necessary training and the good judgment to carry on what is known as general practice. If, in difficult cases, he recommends that a specialist be consulted, the average country resident will think more of him for admitting, candidly, that the case is outside his pale. Just as the good lawyer is one who "may not know the law in the case but knows where to find it in the books," so is the doctor rated by his ability to serve the patient, directly or indirectly.

These same "country" folks share with the doctor in his disappointment over not always having at hand the latest equipment, such as his friend close to a modern hospital may have, but they don't expect the local doctor to be so equipped, any more than they expect a city stock of goods in the shoe store, or a high-class road show at the movie theater. Instead, they glory in the grit that enables him to tackle what comes, measles to appendicitis, mumps to osteoperiostitis.

Above all, they expect him to keep up with the times. It is common knowledge that books and publications are available to every practitioner, and that refresher courses are to be had at hospitals and colleges not too far away. *Most folks agree with the old carpenter who declared that time taken to sharpen a tool is never lost.*

Seeing as how the love of money is the root of all evil—we all root. Few intelligent men are satisfied with a mere livelihood. Few need be. Just how much more than a fair competence a man hopes to make during his active years is largely a matter of his own desires. He may set his stakes at six or seven figures, or he may be like the colored lad who was asked whether he'd rather have a thousand dollars or a million, and said he'd take the thousand, because he reckoned he'd have a "helluva" time paying taxes on the million.

It's a trite saying that many things in this life are more important than money—but this is as true as it is trite. The young man who has skimped and saved to pay his way through college is definitely within his rights when he feels that he is now entitled to a chance at the shekels. For months on end he has dreamed of the day when he could afford to buy the hundreds of things that have mocked his poverty from the shop windows. The pot of gold looms large on the horizon as he begins to paddle his own canoe.

Assuming that he has what it takes to make money, he plunges in with might and main toward a financial goal. Sooner or later—sometimes too late, from a physical standpoint—he comes to realize that there is but limited joy in dollars alone, that it is people, not things, which make for contentment.

There is food for thought in the closing sentence of a letter which a little girl wrote to her uncle not long ago. Having run out of things to say, she added the simple statement: "Good-bye for now. I hope you live all your life." What a pitiful few of us actually LIVE while we are at it!

The successful country doctor is a busy man. Due to the automobile, his practice covers a large area, far larger than that of his predecessor in the horse-and-buggy days. The number of his acquaintances is exceeded by few, if any, men of the community. His emergency calls are often disheartening and inconvenient. Yet he answers them, sincerely and conscientiously.

He may not know it, but as an individual he is looked upon with respect by his fellow citizens. He is pointed out as a man who has "made good" in his chosen field. He is an educated man; he couldn't be a doctor nowadays if he wasn't; and everybody knows it. His opinions and advice upon civic affairs are honored. He is, to drop into the vernacular, "a big duck in a little puddle."

More seemly, however, is that Biblical quotation, properly said of myriads of physicians who have labored close to their fellow men: "He went about doing good."

WARNING REGARDING SILIFORM AMPULS

The Food and Drug Administration has found two shipments of "Siliform" ampuls to be contaminated with living bacteria, and warns that use of them may result in serious injury. The ampuls were manufactured by the Heilkraft Medical Company, Dorchester, Mass., and are of 1 cc. size. Stocks now known to be contaminated were distributed by McKesson & Robbins, Inc., Chicago, Illinois, between February 18 and July 9, 1948. Of these shipments, 12 boxes, each containing 5 ampuls, have not been accounted for. The ampuls do not bear code marks. It is not known at this time whether other shipments are potentially dangerous. For this reason, you are urged not to use this drug, regardless of where purchased, and to notify promptly the Food and Drug Administration, 1211 Post Office Building, Chicago 7, Illinois, or the Council on Pharmacy and Chemistry of the American Medical Association, 535 N. Dearborn St., Chicago 10, of any stocks in your possession. These stocks should be held pending instruction from the Food and Drug Administration.

DOCTOR SENSENICH ASSUMES PRESIDENCY OF AMERICAN MEDICAL ASSOCIATION

William M. Cockrum, M.D.

EVANSVILLE

THE installation of Dr. Roscoe L. Sensenich, of South Bend, as president of the American Medical Association—the third Hoosier physician in 101 years to reach the top office of American medicine—highlighted the recent A.M.A. session in Chicago, as far as Indiana doctors are concerned.

In his inaugural address Doctor Sensenich said that "men live in the United States in good health to a greater average age than ever before in the history of any nation," as he stressed the progress made by American medicine in the free enterprise system.

Many Indiana physicians were in the audience when Doctor Sensenich took over the presidency from the retiring president, Dr. Edward L. Bortz, of Philadelphia. A medal was presented to Doctor Bortz by Dr. Elmer L. Henderson, of Louisville, Kentucky, chairman of the Board of Trustees of the A.M.A.

Two of Indiana's delegates to the House of Delegates received appointments to important reference committees. Dr. Homer G. Hamer, of Indianapolis, was named to the Committee on Medical Service and Prepayment Insurance, and Dr. A. S. Giordano, of South Bend, was made a member of the Committee on Section and Section Work. Dr. F. S. Crockett, of LaFayette, also a delegate, reported on the progress of the Committee on Rural Medical Service, of which he is chairman.

The work of the House of Delegates was for the most part routine. Adoption of new By-Laws and Constitution consumed a large volume of time. In accepting a recommendation of the Reference Committee on Medical Service and Prepayment Insurance, the House directed the secretary and general manager of the A.M.A. to re-establish the medical care and surgical contract for A.M.A. employees with Blue Cross-Blue Shield when the present contract with a private insurance company expires next March. Considerable criticism of the A.M.A. developed earlier this year when the contract with Blue Cross-Blue Shield was rejected in favor of the commercial company.

The delegates received a report of a special committee named by the A.M.A. Board of Trustees several months ago to study the blood bank program of the American Red Cross as it related to medicine. Doctor Giordano chairmanned the committee. The committee again affirmed the approval of the principle of the Red Cross Blood Program but emphasized that before Red Cross enters any community to establish any blood program, the local county medical society should be consulted before any local publicity is begun. It emphasizes that existing blood banks should not in any way be interfered with, and local enterprise and initiative should be encouraged. The committee felt that Red Cross is in a better position to integrate all blood banks into a national, coordinated group so that they can function in case of disaster, either local or national. The committee pointed out that free medical service or supply to anyone without regard to ability to pay is in opposition to the principle that it is the responsibility of an individual to assume the obligations of medical expense just as he does for other living expenses.. Therefore, the committee deplored the use of the term "free blood" in the publicity of the American Red Cross.

The House adopted a resolution presented by the writer, expressing its appreciation for the work of the American Physicians' Art Association, this being the art association's tenth anniversary.

Dr. Ernest E. Irons, 71-year-old Chicago internist and retiring secretary of the Board of Trustees of the A.M.A., was elected president-elect at the closing House of Delegates session. Other officers elected were:

Vice-President—Dr. F. W. Fouts, of Omaha, Nebraska, retiring speaker of the House.

Secretary—Dr. George F. Lull, of Chicago.

Treasurer—Dr. Josiah J. Moore, of Chicago.

Speaker of the House—Dr. F. F. Borzell, of Philadelphia.

Vice-Speaker—Dr. James R. Reuling, of Bayside, New York.

Trustees—Dr. Gunnar Gunderson, of LaCrosse, Wisconsin; Dr. Edwin S. Hamilton, of Kankakee, Illinois, and Dr. Walter B. Martin, of Norfolk, Virginia.

Atlantic City was chosen as the place for the 1951 annual session. The 1949 meeting will be in Atlantic City, June 6-10, and the 1950 session in San Francisco. The Interim Session will be held in St. Louis, November 30 to December 3, 1948. The program will be designed for the interest of general practitioners.

In a straight-from-the-shoulder speech, Dr. Paul R. Hawley, native-born Hoosier, and now chief executive officer of the Blue Cross-Blue Shield Commissions, told the House of Delegates, in an executive session, that prepayment medical care plans must be made to provide adequate medical

care coverage for both low income and high income groups if medicine is to stave off government control. He pleaded for expansion and coalition of the various Blue Shield plans, in order to "give the people what they need in medical service and save the private practice of medicine."

Twelve Hoosier physicians participated in the official programs of the specialty section meetings which were held in conjunction with the 97th annual session.

Dr. Gerald W. Gustafson, of Indianapolis, spoke before the Section on Obstetrics and Gynecology on June 23, discussing "The Management of Occiput Posterior Position." In the same section session Dr. Fred L. Adair, of Chesterton, was one of the principal discussants of a paper on "Emergencies Encountered in Neonatal Period."

Dr. Russell A. Sage, of Indianapolis, spoke before the Section on Ear, Nose and Thoat, on "Differential Diagnosis of Oral Lesions." In the Section on Nervous and Mental Diseases, Drs. David A. Boyd, Jr., and Louis W. Nie, both of Indianapolis, spoke on "Congenital Universal Indifference to Pain."

Speaking on "Vesical Calculus, With Report of a Gigantic Stone in the Female Bladder," Drs. William N. Wishard, Jr., and Myron Nourse, of Indianapolis, addressed members of the Section on Urology. Four other Indianapolis physicians—Drs. William D. Gambill, John E. Fisher, Bernard D. Rosenak and Rollin H. Moser—appeared before the Section on Gastro-enterology and Proctology. They discussed "A Study of the Routine Use of Screening for the Detection of Liver Disease."

The 1948 Distinguished Service Medal awarded annually by the A.M.A. was voted to Dr. Isaac A. Abt, 80-year-old Chicago specialist in children's diseases.

A feature of the scientific program of epochal significance was television broadcasts of surgical operations and treatment by the Northwestern University Medical School, with faculty members in charge. The broadcasts originated in Passavant Memorial Hospital and were viewed by as many as 7,000 physicians at one time on television screens located at Navy Pier, Sheraton Hotel, and the school itself. The broadcasts were declared to be "the largest medical classroom in the world."

Dr. J. Roscoe Miller, dean of the medical school, said that televising of an operation is particularly effective as a method of teaching because doctors and students get the sense of being personally in the operating room. Applications of electronics in therapy and diagnosis were shown, among them a new facsimile system for sending x-ray pictures over wires, or by radio, designed to be of benefit to outlying hospitals or ships at sea.

The technical and scientific exhibits on the Navy Pier were profitable, pleasurable, and stimulating. More than 325 firms were represented. The 185 scientific offerings were rated among the best in A.M.A. history. More than 900 works of art by physicians—oil paintings, water colors, sculpture, wood carvings, photographs, jewelry, et cetera, were on display and drew large crowds.

As a prologue to the "big show," the semi-annual Conference of County Medical Society Officers was held the day before the opening A.M.A. session. It was very successful and a "repeat performance" will be given at St. Louis, by popular demand. Dr. A. M. Mitchell, of Terre Haute, chairman of the conference since its inception a year ago, had formerly been appointed by the Board of Trustees. This time he was unanimously elected by the group to arrange the St. Louis conference and the following year's program. "The Job of the County Medical Society," was the conference subject at Chicago and lively discussion ensued after presentation of the papers.

Attending the House of Delegates sessions, conferences and other meetings, thereby keeping in close touch with all activities and developments, were Dr. Cleon A. Nafe, of Indianapolis, president of the Indiana State Medical Association; Dr. A. P. Hauss, of New Albany, president-elect; Dr. C. H. McCaskey, of Indianapolis, chairman of the Executive Committee; Dr. Alfred Ellison, of South Bend, chairman of the Council; Ray E. Smith, of Indianapolis, executive secretary of the state association; Joseph E. Palmer, executive secretary of the Indianapolis Medical Society; and Arthur P. Tiernan, of Evansville, executive secretary of the Vanderburgh County Medical Society.

Indiana medicine was assured of a prominent spot on the A.M.A. program at Atlantic City next June, when the 50th anniversary of the establishment of scientific exhibits will be celebrated. Honor will be paid to the memory of Dr. Frank B. Wynn, of Indianapolis, known as the "Father of Scientific Exhibits," who exhibited pathologic specimens at the A.M.A. session in Columbus, Ohio, in 1899. This was the beginning of scientific exhibits. Doctor Wynn became director of A.M.A. exhibits and served in that capacity until 1916. The nature of the anniversary observance has not been worked out, according to Dr. Thomas G. Hull, present director of A.M.A. exhibits.

Among the 12,000 physicians who registered at the Chicago meeting were 674 from Indiana.

A.M.A. CONVENTION NOTES

F. R. N. Carter, M.D.

SOUTH BEND

TO ANY observer undoubtedly one of the greatest impressions of the meeting was its enormous size. For years the writer has known of the existence of the Chicago Navy Pier; however, not until this year was it possible to walk from one end of the great building to the other. Registration occurred on the second floor of the north building. Toward the lake from the registration desk were the commercial exhibits, the exhibit of the American Medical Art Association and, finally, the moving picture section. In the south building most of the sectional meetings were held. At the far end of this building was the enormous auditorium which seated two thousand people. Many sectional meetings were held here.

The greatest thrill of the entire meeting, as far as Hoosiers were concerned, occurred in the grand ballroom of the Stevens Hotel on Tuesday evening. Before an audience of distinguished people, which filled the great auditorium, the impressive ceremonies of installing Dr. R. L. Sensenich, as president of the American Medical Association were held.

The ceremonies began when the huge doors of the great room were thrown open, and to the dignified strains of Elgar's *Pomp and Circumstance* an honor guard of distinguished men of the medical profession escorted our own Indiana doctor to the brilliantly and beautifully decorated rostrum, where the installation services were conducted in a simple and dignified manner.

To an Indiana doctor it was quite a thrill to know that our state had produced a man of Dr. Sensenich's caliber. More than this, it was indeed gratifying to see a loyal friend and fellow practitioner from my own city become the president of the American Medical Association.

Suffice it to say that, in the field of medical economy, Dr. Sensenich is a most capable statesman. Under his guidance the A.M.A. will continue to stand for those things that are best in medicine.

The scientific exhibit included everything from Elsie, the Contented Cow, to a new type colostomy cup; or from Johnny, the uniformed Philip Morris midget, to surgical supports that would make ptotic abdomens of the middle-aged take on the appearance of youthful Venuses and Adonises. Everything was there from miracle glass to anatomical charts that revealed the most intimate secrets of your "inners." Hours could easily have been spent to good advantage reviewing these scientific exhibits.

A television program from Passavant Memorial Hospital was presented by Northwestern University Medical School, with the cooperation of E. R. Squibb and R.C.A.-Victor Division of the Radio Corporation of America.

When he sent his first message over a wire, Samuel Morse, the inventor of the telegraph, was so impressed by the miracle which he had accomplished that he exclaimed, "What hath God wrought?"

When I sat before one of the many television sets that were televising a surgical operation that was occurring many city squares away, I had exactly the same feeling that the great inventor of the telegraph had many years ago. I was struck with awe, and was impressed with the potential possibilities of this great new invention and what it would mean as an agency for teaching doctors of the future.

The commercial and scientific exhibits were so large that one wondered if any doctor would find time to attend the scientific programs. The writer visited eight sectional meetings on Wednesday morning and, much to his surprise, found each of them well attended. Most of the auditoriums where sectional meetings were held could seat about 750 persons. In every meeting there were from five to six hundred in the audience.

The quality of the scientific programs was apparent in every meeting. The fact that many Indiana medical men took part in the discussions of many of the papers was splendid evidence of the quality of medical practice which our state enjoys.

At the entrance to the section on registration was a case filled with the many silver trophies that were offered by the American Medical Golfer's Association. To any golfer certainly these were an inducement to settle down to the game and turn in a good score. I wonder if any of these prizes came to Indiana.

The scientific efforts of Papanicolaou were responsible for many exhibits of malignant cells in body secretions. Cancer cells in the sputum, in the bronchial secretions, as well as in the vaginal secretions, were elaborately demonstrated.

An excellent exhibit on the subject of rabies was provided by the American Veterinary Medical Association. Prevention by rabies innoculation and the control of stray dogs was the program advocated by this great organization.

At the Tuesday evening meeting, Dr. Isaac A. Abt, 80-year-old Chicago pediatrician, received the A.M.A.'s 1948 award for distinguished service. His textbook on pediatrics has always been a source of valuable information.

Our state president, Cleon A. Nafe, was seen coming out of the television exhibits. He was enthusiastic about the pictures which were being televised.

A. F. Weyerbacher was impressed with the fact that the Chicago papers gave more space to the political convention being held at Philadelphia than to the meeting of the A.M.A. In past years *The New York Times* gave us space on page one. *The Chicago Tribune* relegated us to page five, part two.

Present at the inauguration of Dr. Sensenich on Tuesday evening were Dr. Alfred Ellison, chairman of the Council, and Dr. Augustus P. Hauss, president-elect of the state association.

The writer was interested to hear that a lot of allergy victims, fleeing to Arizona to escape their asthmatic nightmares, could save the trip by simply curbing their family quarrels or their distress over a drop in the stock market.

Cartoonist Al Capp, the creator of Li'l Abner, was the master of ceremonies at the Amputees Sports Show held in Medinah Temple on Wednesday evening.

"Fight Cancer" was a dominant thought everywhere in the scientific exhibit. One newspaper, in speaking of this, headlined it's article thus: "Hope to shake cancers apart." It went on to say that hidden animal cancers are being detected and attacked through the medium of echoes from supersounds. These sounds are inaudible to human ears and have a very high pitch. Such sounds are made by crystals and are transmitted to the body by water or oil between the vibrator and the skin.

The subject of Dr. R. L. Sensenich's inaugural address was "American Medicine and the Spirit of Its Progress." It is reprinted in *The Journal of the A.M.A.* of June 19, 1948. The plan of American medicine is aptly phrased in the following quotation from this address:

"The (National Health) program provides for the interweaving of all the agencies of community life to attain the maximum results of health and happiness *by voluntary effort and individual freedom*, governmental aids to be utilized only in those areas in which the individual and the community require that assistance."

The special exhibit on physical medicine proved very interesting to the writer. The methods used in the rehabilitation of the hemiplegic were far from the usual procedures followed in general practice. Boys with both legs amputated above the knee were roller-skating around the exhibits. With two good legs it is difficult enough to learn to roller-skate.

The American Physician's Literary Guild had an exhibit of it's work. Anything to do with writing is always of interest; hence, a great deal of time was spent looking over the writings of fellow physicians. It was no surprise to find that even a few poets existed among our kind, and the poetry was good.

A thousand different varieties of art were entered in the annual exhibit of the American Medical Art Association. There were hand painted neckties, cartoons and caricatures, hand painted curtains, mosaic art works, charcoal sketches, photography, sculpture, water color and oil paintings.

The subject matter undoubtedly showed the multitudinous wonderings of the different physicians. The art works were inspired by subjects as far apart as the Grand Hotel at Mackinac Island and the Taj Mahal in India. The different styles of expression were as far apart as the cubist's abstraction and the familiar summer landscape of the painter in oil; or as far apart as the one sculpturer's conception of arrested motion, which appeared to the writer more like one of Rube Goldberg's crazy cartoons, and a chiseled likeness of Mary, the Mother of God.

Indiana was represented in the exhibit by the following physician artists:

Cornell, Beaumont S., of Fort Wayne, Indiana. His contribution was a Florida coast. The scene was a roadway, with a tropical, pink-colored house, and the ocean beyond. The picture had lovely color values and was well painted.

Dycus, Walter A., of Evansville, exhibited two excellent photographs called "The Ladder," and "The Frozen Falls." Both were excellent photographs made from wonderful subject matter.

Wierzalis, Edward F., of Huntington, presented a sculpture of Nora. The writer could not locate this exhibit. However, if it was equal to the other Indiana exhibitors' works it, too, should merit praise.

WHAT EVERY MEDICAL OFFICER SHOULD KNOW ABOUT THE ATOMIC BOMB[1]

VI. Pathologic Anatomy of Radiation Effects of Atomic Explosion

Before considering the radiation effects on the systems of the body, it is important to consider the relationship of lesions and time of death. In Japanese patients dying within two weeks after exposure there was histologic evidence of radiation in the bone marrow, gonads, gastrointestinal tract, and skin that was not manifested clinically. In the group dying in the third to sixth weeks, bone marrow changes predominated, while neutropenic ulcers and hemorrhagic symptoms were very common. The general nutritional state declined. Gross changes were at the peak. Those dying in the third and fourth months showed beginnings of recovery in bone marrow and hair regeneration. Testicular and connective tissue changes remained evident. There was an increase in the number of emaciated patients. The poor nutrition was not based entirely on shortage of food. Intestinal lesions and other factors played an important part.

Skin. The quickly visible changes in Japanese affected by an atomic bomb were the pigmented areas that appeared in the first few weeks and persisted. These had such sharply demarcated outlines that they were considered as flash burns. Whether very soft, nonpenetrating gamma rays played a role has not been determined. Development of what we have recognized as ionizing ray skin burns was not seen. There were a few early cases of bullous edema that may have been from gamma rays. Epilation appeared mainly on the scalp, occasionally more on one side than the other; in the axilla in 16 percent; in the pubic region in 12 percent; and in the eyebrows in 8 percent.

Microscopically the hair follicles showed distinct changes both in the epidermal and dermal coats. Early specimens were not obtained, but in the fourth week the internal root sheaths could not be identified, the external sheath (continuous with the malphigian layer of the epidermis) being continuous with the hair shaft. Vascularity of the papillae was reduced, and the adjacent epithelium was atrophic. Pigment was irregularly clumped. The dermal coat showed thickening both of the inner hyaline membrane and the cellular fibrous layer. In pushing the base of the hair toward the surface a continuous shrinking in the bottom of the follicle occurred until regeneration took place with new cells over the papillae in a manner similar to ordinary hair replacement. There was also atrophy of the sebaceous glands, but this was also present when old hairs were replaced in the normal individual.

Some of the sweat glands were small, their cells occasionally vacuolated and pyknotic, and the basal membranes thickened. Evidence of radiation on the skin was not definite. Third degree flash burns could also be expected to have some radiation effect, but interpretation was difficult. At the edge of the burn area there was hyperpigmentation in basal cells and chromatophores. Some thinning of epidermis, hyperkeratosis, ironing out of papillae, and hyperpigmentation of basal cells were found in the scalp. Vascular and collagen changes were minimal.

Pituitary. Large basophilic cells with much cytoplasmic vacuolation appeared in 25 percent of the males dying in the third to sixth weeks. Because cells of this type are found in mammals after castration, they are known as "castration cells." In the second and third months large basophils were found, only a few being vacuolated.

Adrenals. In the first two weeks there was a loss of lipoid in the cortex, but in the next months the cortex progressively lost its orange-yellow color and was distinctly thin. Microscopically, most cells were granular rather than foamy, and the atrophy was most marked in the outer zona glomerulosa, contrary to what was expected. When foam cells were present, they were usually in the inner layer. The medulla was normal.

Heart. Epicardial petechiae were found within the first two weeks, and there was microscopic evidence of some perivascular and rare muscle edema in the myocardium. These changes continued to be present during the second month when myocardial hemorrhages were also seen. After the second month no distinct irradiation changes were found.

Lungs. Only the slight perivascular edema of the pleura that appeared in the first two weeks might be a primary radiation effect. Hemorrhagic and necrotizing pneumonia were common after the first weeks, as secondary lesions.

Genitourinary system. Except for hemorrhagic manifestation, there were no primary lesions in the kidneys and ureters. In the hemorrhagic stage of the radiation disease, mucosal hemorrhages in the bladder might result in necrotizing ulceration without evidence of leukocytic infiltration. The prostate and seminal vesicles were not remarkable, except for a rare neutropenic necrosis and the presence of a few spermatozoa that were morphologically normal in spite of the irradiation.

The testes showed intense changes in almost every cadaver. As early as the fourth day when

[1] The sixth, seventh and eighth of a series prepared by the Special Projects Division, Office of The Surgeon General. Reprinted from *The Bulletin of the U. S. Army Medical Department*, by permission of The Surgeon General, Department of the Army.

the parenchyma had a normal appearance grossly, the histologic sections presented marked injury of the germinal epithelium, numerous cells of which were necrotic and free in the tubules and even in the rete testis. The number of mitoses was small. Sertoli's cells were increased in number. Mature spermatozoa were found even in later specimens with no spermatogenesis. Apparently uninjured spermatozoa appeared in the seminal vesicles. In the second month gross examination revealed little. A few necrotic germ cells remained, but most had disappeared, and phagocytic or infiltrating inflammatory cell activity was absent. A few bizarre cells still approximating the basal membrane appeared to be spermatogonia. Sertoli's cells were more numerous. The tubules had started to shrink. At this time also the interstitial cells of Leydig were so prominent that some interpreters considered them hyperplastic. Some of the small interstitial vessels showed the most marked vascular change of any part of the body. Beneath the distinct thin endothelium was an eccentrically located mass of eosinophilic, homogeneous, refractile material that almost occluded the lumen. This change was often best seen near the tunica albuginea and was present also in the third and fourth months. The interstitial tissue was less, but still prominent. The basement membranes were quite thick, wavy, and acellular. The tubules, more atrophic at this stage, were often hyalinized. Elsewhere Sertoli's cells had replaced the germ cells, which were rare. In the third and fourth months the state of nourishment was poor and specimens from the Dachau prison camp in Germany have been described as showing similar testicular changes.

Changes in the ovaries were much less striking. Gross changes, except as part of the hemorrhagic phenomena, were absent, even to the presence of a well-developed corpus luteum of pregnancy seen about the end of the first month after irradiation. Histologically, primary ova were usually present and only occasional specimens had a few atresic primary follicles. The absence of developing follicles was usual. There were no corpora lutea and the "resting phase" of the endometrium reflected this. Amenorrhea was distinctly increased in Nagasaki, and a significant number of abnormal births and an increased death rate of the mothers in relation to distance from the explosion were found there.

Gastrointestinal tract. This tract was one of the first to show gross lesions. Even before hemorrhagic manifestations the cecum or colon, particularly, might present a widespread change marked by swelling, green and yellow-gray coloration, and induration of the mucosa, sometimes with a pseudomembranous effect, and with much submucosal edema. Later mucosal hemorrhage might institute another cycle of similar change in the stomach or intestine. This change might begin with ulceration of the mucosa at the site of the hemorrhage and progress to a pseudomembrane or deep ulcer. Again, in the third and fourth months an enteritis, usually in the large intestine but sometimes affecting the small intestine and occasionally the stomach, might be the most prominent lesion. In the small intestines only the tips of the folds might first be involved. These looked at first as though they had been dipped in boiling water and then became green or yellow-gray. A few specimens of small intestine had a diffuse mucosal process. The large intestine in this late stage usually had a more widespread process that might extend from the ileocecal valve to the rectum. The thickened wall was characteristic. A pseudomembrane and ulceration were sometimes present so that the morphology was similar to that of bacillary dysentery. Much of the process here was not only an irradiation effect of the sensitive intestine, but also a result of the lowered local ability to cope with intestinal microorganisms and, probably more important, to the lowered antibiotic capabilities of the blood.

Microscopically the epithelium early contained extremely bizarre cells with giant hyperchromatic nuclei and multipolar mitoses. The swelling was seen to be from edema and the peculiar coloration from the absence of infiltrating leukocytes. Later, areas of mucosal ulceration with much fibrin, few leukocytes, and in the remarkably edematous submucosa quite a few histiocytes, a few lymphocytes, and occasional eosinophils were seen. Plasma cells of the lamina propria remained numerous.

Spleen. The lymphoid elements here reacted to radiation as in the nodes. Early spleens were usually small, but occasionally showed the early swelling reaction. On section, they were dark red and firm, the follicles were indistinctly seen, and the trabeculae were prominent. Besides the near absence of lymphocytes, large mononuclear cells were increased, and erythrophagocytosis and hemosiderin deposits were seen. In the second month the spleen was small and follicles were absent. There was a syncytial reticulum around the follicles in which the slight lymphocytic content of the organ was seen. Atypical large mononuclears were found in about 25 percent. Through the fourth month there was still some atrophy. Occasional germinal centers appeared, and the lymphocytic content showed evidence of recovery.

Lymph nodes. The high sensitivity of lymphoid tissue to ionizing radiation resulted in tremendous atrophy seen as early as the third day. Lymphocytes almost disappeared, leaving a lacy framework that was histologically spectacular. A similar picture was found in the tonsils and other lymphoid tissue. Changes in the germinal centers might be necrobiosis, but a departure from normal was not marked except when the germinal centers disappeared, as they did in three-fourths of those who died in the first two weeks. The early gross appearance of human nodes was not known, but bombed animals showed some enlargement, softening, and

a paler color. By the second week large atypical mononuclear cells, considered by one observer as lymphoblasts, appeared. These cells logically could be pathologic forms whose sensitive nuclear chromatin was deformed by the radiation. About the fifth week, the nodes were usually small and almost devoid of lymphocytes and germinal centers. Bizarre large cells were more numerous. Plasma cells, eosinophils, and mast cells, along with increased numbers of reticulum cells, were present. Lymphocytes were more numerous in the fourth month but were still reduced.

Bone marrow. The cellular picture of irradiated bone marrow was tremendously changed in the first week after the bomb explosion. There was almost total disappearance of blood-forming elements, excepting small islands of erythropoiesis, which were less sensitive. By the end of the week reticulum began to proliferate and differentiated first into lymphocytes and plasma cells rather than myeloid cells. This type of differentiation was predominant until the fourth week when myeloid differentiation was seen. Most marrows of those dying before six weeks were hypoplastic, but a few showed hyperplasia with arrest of maturation. Most of the fatal cases of the third and fourth months showed hyperplasia, which in the femur was grossly evident as pink marrow extending through from one-third to one-half of the shaft. In these the maturation defect decreased and more neutrophils were found in the peripheral blood and in infected tissues. A few of the older cases, however, showed aplasia with pink gelatinous femur marrow. Some grossly appearing hyperplastic marrows were really hypoplastic, the pink color coming from dilated blood vessels. Whatever the marrow picture, there was usually a profound leukopenia at some time in those dying in the first six weeks. Later leukopenia did not persist, and even those who died had leukocytosis except for the few that had aplastic marrows.

Miscellaneous. Only secondary hemorrhagic or necrotic changes were found in the brain. No changes were found in the pancreas, except for some mitoses in the islet cells. The presence of any irradiation effects in the liver is a moot point.

Secondary effects of radiation of reticulo-endothelial system. Hemorrhagic lesions and leukopenic necrosis affected the irradiated body about the end of the first month. The pharynx and its connections, the gastrointestinal tract, the respiratory organs, and the skin manifested both changes. In addition, particularly the urinary tract, mesothelial linings, muscles, and all soft tissues, showed petechiae, purpuric patches, or large ecchymoses. These changes were outstanding clinically. The severity depended on the location of the larger hemorrhagic lesions. Hemorrhages in the linings of the pharyngeal regions, of the bowel, or of the urinary tract gave signs externally. Large submucosal hemorrhages as well as petechiae appeared in the kidney pelves and in the bladder and sometimes in the ureters. Hemorrhages breaking through the epithelium of bacteria-laden surfaces often initiated the neutropenic ulcers, which in the pharynx were similar to acute agranulocytosis. Ulcers sometimes extended to the tongue, gums, buccal mucosa, lips, and even the skin to give the picture of noma. Such ulcers also began without hemorrhage. Bacteria ordinarily nonpathogenic might cause serious consequences through the loss of sufficient reticulo-endothelial reserves. Ulcers throughout the gastrointestinal tract were on a similar basis, as indeed, many of the diffuse mucosal changes might be. The necrotizing pneumonia appeared to be a part of this picture. There was little leukocytic reaction in these lesions, which overwhelmed the patient and lead to death.

Case History. A 29-year-old man was at a distance of 0.7 km. from the explosion center. He was outdoors a few paces from a concrete building and was struck by a falling roof that inflicted slight head and neck injuries. There was nausea on 6 August 1945, and on the same day he vomited about 25 times. Malaise, accompanied by anorexia, began on 6 August and lasted until 10 August. He again experienced malaise from 21 August until he died on 1 September. Anorexia appeared four days after the second onset of malaise. There was epilation and gingivitis on 21 August, which persisted. The gingivae began to bleed on 30 August. On 25 August tonsillitis and purpura were noted. Both of these symptoms lasted until death. There was a high fever between 24 August and the time of death; and there was a productive cough beginning on 25 August with a hemoptysis on 30 August. The urine examined on 29 August was positive for albumin and negative for sugar.

Sections of marrow in this patient were hyperplastic, showing vascular adipose tissue crowded by a large number of young myelocytes. Mature polymorphonuclear leukocytes and even stab cells were rare. There was an occasional megakaryocyte. Occasional cells were found in mitosis. A few small cells with shrunken nuclei, thought to be normoblasts, also were found. Other important lesions at necropsy were: petechiae of the skin; epilation of the scalp; focal necrosis of the pharynx, tongue, tonsils, and larynx; necrotizing gingivitis; an abscess in the region of the right mandibular joint; necrotizing and hemorrhagic aplastic pneumonia; and minute hemorrhages of the gastrointestinal tract, trachea, and renal pelvis.

VII. Detection of Overexposure to Ionizing Radiation

At present the potential sources of exposure to radiation include: (1) diagnostic and therapeutic x-ray units, (2) industrial x-ray machines, (3) radium and its degradation products, (4) cyclotrons, (5) the chain reacting pile, (6) radioisotopes produced by the pile that are being used in tracer studies, therapy, and as sources of heavy radiation for biologic systems, and (7) the atomic bomb and its fission products. It is apparent that the medical profession and public health authorities must take cognizance of the sources of exposure and endeavor to establish means of prevention and recognition.

Prevention is accomplished by careful measurement of radiation intensities by personnel film badges and radiation detection instruments whenever radiation may be present. Personnel should be followed closely for the presence of radioactive isotopes in nasal secretions, excreta, and on the skin. Where radioactive gases may exist, expired air should be monitored. In brief, overexposure to radiation should never occur. Since signs and symptoms are late, conditions conducive to excessive exposure should be detected by physical measurements before cellular damage occurs. In spite of this, protective regimens may fail, and in the advent of atomic warfare many will be overexposed to ionizing radiation regardless of precautions. Many earlier scientists learned of the hazards of radiation by tragic personal experience. The incidence of radiation burns, ulcers, and superimposed cancer in the early physicists and radiologists, the incidence of aplastic anemia in x-ray technicians, and the greater incidence of leukemia in radiologists point to the possible hazard of long, continued minimal radiation and potentially harmful cumulative effects.

The effects of overexposure may be acute or chronic. The exposures may result from any type of radiation externally or internally applied. The clinical picture will depend on the amount, rate of delivery, and depth of the dose. Acute overexposure may be defined as a single total body exposure of more than 50 r. delivered within a period of a few hours. The signs and symptoms that may develop vary with the penetrating ability of the radiation and the amount absorbed. If the skin receives a large amount of soft x-ray or beta radiation, anything from a slight erythema to massive vesicle formation and destruction of its full thickness may develop. The injury will resemble thermal burns.

Similar cutaneous injuries can be caused by more penetrating radiations; but, in addition, other signs and symptoms such as diarrhea, nausea, vomiting, headache, anuria, purpura, and secondary infections largely caused by the leukopenia may develop. The latent period before the development of symptoms will vary with and be inversely proportional to the amount of radiation absorbed. The symptoms and signs will be directly proportional to the amount of radiation received up to the point that the latent period becomes so short that there is insufficient time before death for the entire picture to develop. The signs and symptoms of acute overexposure to penetrating radiation are variable. Although the best biologic index of overexposure to radiation is the blood, with the less penetrating external radiation the blood changes are less marked and may be absent.

The blood changes following acute exposures are fairly uniform if the exposure is over 100 r. The changes with smaller amounts of radiation may be missed if careful and repeated observations are not made at frequent intervals. There is, however, a uniform response to amounts over 100 r. that is roughly proportional to the amount received, up to a maximum response in the absolutely fatal dose range. The response is a prompt decrease in the total lymphocyte count that is detectable within a period of a few hours. The decrease attains a maximum within about seventy-two hours. Recovery may or may not occur, depending on the amount received. Another quite constant phenomenon is an initial neutrophilic leukocytosis caused by mobilization of the neutrophils and perhaps accelerated maturation and release from the bone marrow. It is reported by some workers that the leukocytosis does not occur with massive amounts of total body radiation (over 500 r.) in some species. The changes in the numbers of platelets and red blood cells and morphologic changes of the leukocytes are less certain and vary so much with the dose and the survival time that they will not be considered here. The acute blood changes can be summarized as follows: If no drop in the total lymphocytes is detectable in the first seventy-two hours, it can be stated with certainty that the exposure to radiation has been small and that serious illness will almost assuredly not occur.

The chronic overexposure to ionizing radiations presents an entirely different problem. The changes that occur are insidious and progressive. In fluoroscopists, radiochemists, or radium handlers the following may develop on the hands: (1) an increased brittleness and tendency to develop longitudinal ridges of the fingernails, (2) loss of integrity of the fingerprint by patches of atrophy, (3) impaired sensation, and (4) pigmentation. In general, as with the acute exposure, the blood is the best biologic index of overexposure to radiations. In order to evaluate the blood picture, some sort of norm for the average person must be established. This is most difficult, for the human blood is variable. Leukocyte counts of 4,000 to 16,000 are occasionally found in people who are in every other detectable respect perfectly healthy. The differential counts vary considerably with age and

may remain abnormal for many months following infectious mononucleosis. Erythrocyte counts and hematocrit and hemoglobin determinations similarly vary widely. The time-honored normal values for hematological measurements probably include 80 percent of a given population within the upper and lower limits of the ranges given in standard textbooks. The 20 percent of normal individuals outside of this range will cause considerable consternation in a radiologic safety program.

How are blood changes that may be caused by chronic overexposure determined? First, base line counts should be established on all who may conceivably be exposed. The counts should be made at monthly intervals. Notations on the occurrence of colds, infections, and other symptoms should parallel the blood records. Relative changes in the blood of a given individual may then more readily be detected. The following hematological criteria for presumptive evidence of overexposure to radiation are offered and have been based on standard normal values and possible changes that have been described in the literature: (1) a depression of the leukocyte count below 4,000; (2) an elevation above 15,000 with an absolute and relative lymphocytosis; (3) a relative lymphocytosis with a low total count that returns to normal following removal from exposure; (4) an increased mean corpuscular volume, a shift in Price-Jones curve to the right, and an increase in the mean corpuscular diameter; (5) a reticulocytosis over 2 percent; and (6) an erythrocyte count over 5.1 million/cu. mm. and hemoglobin over 18.0 gm. percent. If any of the above criteria develop in a person who has a definitely established base line and who is associated with radiation, it is presumptive evidence of overexposure to radiation until proved otherwise.

Many other phenomena have been suggested as hematological evidence of overexposure. Changes in blood coagulation, prothrombin times, platelets, and morphologic changes in leukocytes, such as toxic granules, basophilic staining, and vacuoles (the toxic triad), have all been offered. It is exceedingly difficult to evaluate the importance and the diagnostic value of those changes. The evaluation of chronic exposure of any given individual in terms of changes within the blood cannot be made with absolute certainty. The following procedure may yield helpful information: (1) Remove the suspect from all possible sources of radiation. (2) Study breath, excreta, and nasal swabs for the presence of radioactive isotopes by making differential radiation counts. (3) Study the blood at weekly intervals and compare with the base line counts. (4) Endeavor to eliminate other factors, such as infectious mononucleosis, infectious lymphocytosis, virus diseases, benzol poisoning, and heavy metal poisoning. (5) Examine others that may have been similarly exposed and compare the base line mean leukocyte counts with the present mean counts for the group.

The fifth maneuver may yield more information than all the other blood changes combined. If a statistically significant difference in the means of the leukocyte counts of a group of people can be demonstrated during known chronic exposure as compared to the base line means, particularly if the difference shows a downward trend, it can be stated with some assurance that there has been chronic overexposure to radiation. The development of the above presumptive signs in the mean leukocyte counts for a group must be considered as evidence of overexposure until proved otherwise. The main bulwark of protection from radiation must remain physical control and measurement by established monitoring procedures.

VIII. Public Health Aspects of Atomic Explosion

It is hard to think of a group as other than made up of individuals. It is equally difficult to regard the individual without giving some consideration to the fact that he is a member of society. Public health is that branch of medicine that deals with the relationship of the individual to the community and of the community to the individual. At present the emphasis is shifting from the absence of disease to the presence of health.

In the event of an atomic explosion the medical officer will be called on to assess the hazard and to advise the command accordingly. He will probably have the necessary physical findings supplied to him. The magnitude of the hazard will depend on many factors. The advice of not only the physicist but also the meteorologist, geologist, and oceanographer will be needed. In damp or rainy weather there is little dust, therefore ground contamination will not be as serious from an internal (inhalation) standpoint as it would be under dry conditions. In assessing the hazard, it must be kept in mind that external radiation is more easily dealt with than internal radiation. You can guard against external radiation, but you must prevent internal radiation. Decontamination of the skin, although at times difficult, is far easier than decontamination of the thyroid, lungs, or bone.

The common personnel monitoring devices are film meters, pocket ionization chambers, pocket electroscopes, and Geiger-Müller tubes. Area monitoring instruments include Geiger-Müller tubes, electroscopes, ionization chambers, film meters, and dust- or air-sampling devices. Let us assume that an area is contaminated. It may be contaminated with: (1) Alpha emitters. This will constitute a most serious hazard if such substances gain access to the interior of the body. There will be no external radiation hazard. (2) Beta emitters. This will constitute both external and internal radiation hazard, which is more serious per unit if internal. (3) Gamma emitters. Here again we must think of both external and internal hazard, which is

more serious from a practical standpoint if external. (4) Contamination. Contamination will almost certainly not be limited to one of the above types of radiation.

Food. It must be assumed that all food found in the area is dangerous. The food may contain induced radioactivity. This is unlikely to be present in dangerous quantities, because of generally unfavorable conditions and because of the short half-life of many substances. The medical officer will, however, probably be called on to give an opinion in these cases. Radioactive substances will most likely have been deposited on the food. In this case decontamination will be impractical or impossible. Canned or otherwise protected foods may be eaten only after careful inspection and most rigorous attention to detail in removing the food from the protecting agent. If it is necessary to bring food into the contaminated area, a high degree of laboratory precision, comparable to aseptic surgical technique, must be maintained in the handling of it. Smoking should not be allowed, as the handling of tobacco adds one more hazard.

Water. If possible, no water should be drunk in the area. If canteens are to be taken in, troops must be drilled in the matter of drinking without contaminating the mouth of the canteen by wiping. If larger amounts of water must be taken in, this greatly increases the hazard. The water in an area may be contaminated as a part of the general area contamination or may have become contaminated upstream. What can be done about decontamination? (1) Boiling is useless and may be harmful. It is unlikely that all contaminants will be volatile. Boiling will then serve only to concentrate and increase the contamination. (2) Storage, although useful for short-lived isotopes, is impractical for field operations and of little benefit for long-lived isotopes. (3) Filtration offers some promise and it is especially hoped that experimental work will point the way to practicable means of field application. (4) Chlorination and other chemical procedures are useless. (5) If we can combine precipitation and filtration, we may greatly reduce the load on precipitation. Here again, methods must be developed that are applicable to field use.

Prevention of dissemination by personnel is often of great importance. The underlying principles are always the same and may be illustrated by a discussion of the evacuation of an area. A decontamination center for area evacuation should be set up near the border of the contaminated area and all traffic in and out of the area controlled. Facilities must be provided for personnel entering the contaminated zone to remove all clothing, especially outer clothing, and change to overalls, hat, gloves, and boots. All food and tobacco should be left behind. Efficient monitoring is essential. On leaving the contaminated zone, personnel remove hat and gloves, wash face, neck, and hands thoroughly five times with soap and water, remove remaining clothing, and then soap and thoroughly wash entire body five times. The monitor located in a room between the shower and the uncontaminated side gives permission to go to the "clean" side and put on "clean" clothing. Laundering facilities for contaminated clothing must be provided. Shoes will present a difficult problem for evacuees leaving the area.

One may work with any amount of radioactive material if proper precautions are taken; but one cannot work with even the smallest amounts without proper precautions. Troops should learn to appreciate without hysteria the dangers of exposure.

CONGENITAL MALFORMATIONS FROM GERMAN MEASLES

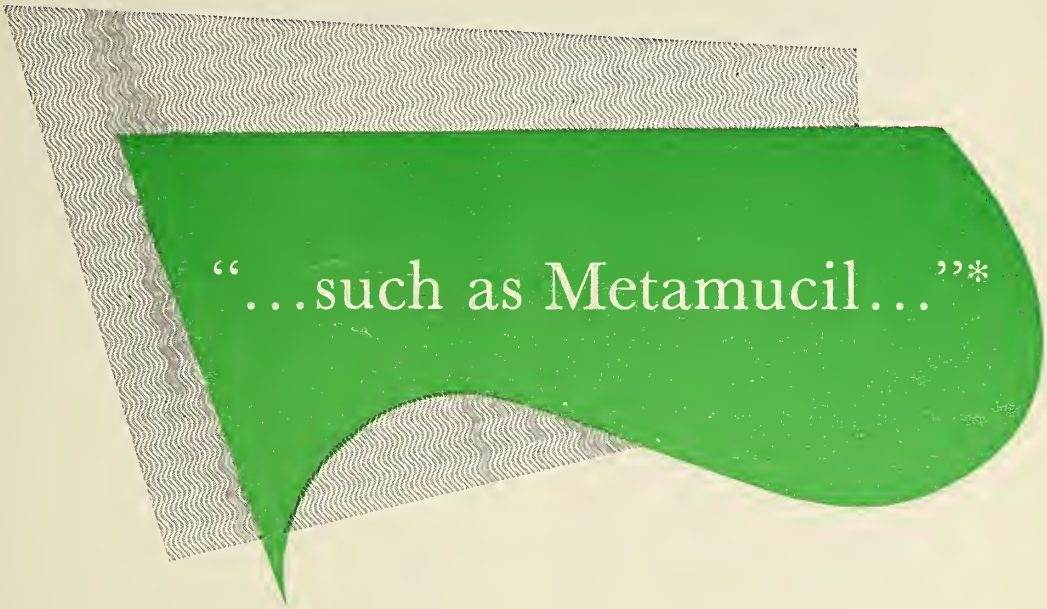
The web of proof that German measles during the first three months of pregnancy may cause congenital malformations is being woven together. Another strand in this web is the first quarterly report of the committee appointed by the National Society for the Prevention of Blindness and the American Academy of Pediatrics and headed by Dr. Herbert C. Miller of the University of Kansas Hospitals.

In the report of 132 mothers who had German measles during the first trimester of pregnancy there were eighteen babies reported as normal. Sixty-two babies weighed less than six pounds at birth. Seventy-six babies had congenital cataracts. Thirty-five were found to be partially or completely deaf. Twenty-two babies were microcephalic and forty-six were mentally retarded. Malformations of the heart were diagnosed in sixty-seven babies, but none were diagnosed as "blue babies." Disturbances of the eye, other than congenital cataracts, were observed in thirteen babies, including congenital glaucoma three, microphthalmus five, nystagmus two, chorioretinitis two, and strabismus two. Dental defects were found in two children, one of whom had congenital absence of some of the teeth and the other of whom had a diffuse enamel defect. Hypospadias was observed in four children and inguinal hernias in four. Malformations of the extremities, including club foot and webbing of the fingers, were found in three babies. Cleft palate was diagnosed in three children and harelip in one. Micrognathia was diagnosed in one child. There was one cretin, one mongolian idiot, one child with enlargement of one ear, another with enlargement of one breast, one child with a defect of the fourth rib.

Other infections than German measles were reported, but the data is too scanty except perhaps in respect to infectious mononucleosis. There have been four mothers who contracted infectious mononucleosis during the first ten weeks of pregnancy and three of the four babies had malformations of the heart. Two of the three babies died in the first two weeks and postmortem examination revealed extensive congenital malformations. One of the three babies with heart trouble had congenital cataracts. No other malformations were found. The fourth baby has remained entirely well.

In order to make this study of increasing significance, the committee needs more case material, especially cases of German measles in expectant mothers where the diagnosis has been made by a physician.

Physicians who have such information are requested to write to Dr. Herbert C. Miller, University of Kansas Hospitals, Kansas City, Kansas, for a questionnaire.



For the treatment of the spastic colon the author suggests diet, elimination of the nervous element and "bulk producers." As examples of these he lists "agar-agar, in finely powdered form, in flakes, or in cereal-like form; derivatives of psyllium seed, such as Metamucil . . . ."*

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*Glafke, W. H.: Spastic Colon, M. Clin. North America 26:805 (May) 1942.

†Council on Pharmacy and Chemistry: New and Nonofficial Remedies, 1947, Philadelphia, J. P. Lippincott Company, 1947, p. 320.

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Medical Panorama by the Associate Editor

EDITORIAL COMMENT ON THE NATIONAL HEALTH ASSEMBLY

Reports concerning the National Health Assembly, which convened in Washington, D. C., under the auspices of the Federal Security Administrator, May 1 to 4, 1948, indicate that it was attended by approximately one thousand persons. The participants represented the various professions, governmental agencies, service organizations, labor unions, and industrial concerns who are interested in the broad field of health, welfare, and related subjects.

Contrary to the situation which prevailed in a similar gathering in 1938, the medical profession was adequately represented. Physicians were chosen for many of the committee appointments and many of the sections were presided over by doctors. In addition, many delegates of state and local medical societies attended the deliberations and participated in discussion.

The general reaction to the conference, as expressed by reports and editorials in the medical press, seems to be one of pleasant surprise. Prior to the meeting the impression was that the entire program was arranged to provide a sounding board for those who are promoting the cause of socialized medicine and compulsory health insurance. This impression was based on the record of a similar conference in 1938 and on the fact that the medical profession originally had almost been eliminated from the executive committee.

While the assembly was attended by many vigorous proponents of compulsory insurance, and while numerous representations were made in its behalf, debate on the subject was conducted along reasonable lines and in a constructive manner. *The Bulletin of the San Francisco County Medical Society* states: "The representatives of the A.M.A. and the Council on Medical Service, including Drs. Lull, McGoldrick, McVay, Sensenich, Martin, Hawley, and others, adopted a conciliatory and restrained approach, and may have been instrumental in the prevention of adoption of resolutions favoring compulsion."

Charles S. Nelson, executive secretary of the Ohio State Medical Association, reports that the assembly was conducted efficiently, and that controversial questions were handled in a fair and impartial manner. "The few instances of propagandizing which occurred should be regarded as minor phases of the assembly and not typical of the over-all character of the conference."

One significant point reported was to the effect that the majority of the delegates seemed to be convinced that a great many of the health problems can and should be solved at the local level. This belief did not exclude state and national planning and cooperation, however, the general consensus being that activities of the larger governmental units should be kept within a reasonable limit.

Much favorable comment has been made concerning the planning and conduct of the assembly. The delegates were divided into 14 sections, each of which was assigned specific topics for exploration and discussion. All the work remained at the discussion stage, there being no resolutions or recommendations voted on. Each section's work was summarized by a steering committee which reported at the end of each session on the questions discussed, the pros and cons presented, and areas of agreement and disagreement.

The Bulletin of The Los Angeles County Medical Association states: "It was an intensive four days of serious discussion. There was a high concentration of energy and enthusiasm; people with divergent opinions and experiences kept going from early morning until late in the night. It was a well organized Conference. Convention planners can take a lesson in convention management in this respect from government planners."

The Section on Medical Care attracted the largest number of delegates and provided some of the most heated discussions. The following general conclusions are taken from the tentative final report of the section:

1. Adequate medical service for the prevention of illness, the care and relief of sickness and the promotion of a high level of physical, mental and social health should be available to all without regard to race, color, creed, residence or economic status.

2. The principle of contributory health insurance should be the basic method of financing medical care for the large majority of the American people, in order to remove the burden of unpredictable sickness costs, abolish the economic barrier to adequate medical services and avoid the indignities of the "means test."

3. Health insurance should be accompanied by such use of tax resources as may be necessary to provide additional
   a. services to persons or groups for whom special public responsibility is acknowledged and
   b. services not available under prepayment or insurance.

4. Voluntary prepayment group health plans, embodying group practice and providing comprehensive service, offer to their members the best of modern medical care. Such plans, furthermore, are the best available means at this time of bringing about improved distribution of medical care, particularly in rural areas. Hence such plans should be encouraged by every means.

5. The people have the right to establish voluntary insurance plans on a cooperative basis, and legal restrictions upon such right (other than those necessary to assure proper standards and qualifications), now existing in a number of states, should be removed.

(Continued on Page 848)

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(Continued from Page 846)

6. High standards of service, efficient administration and reasonable costs require:

a. Coordination of the services of physicians, hospitals, and other health agencies in all phases of prevention, diagnosis, and treatment;

b. Effective cooperation between the providers and the consumers of such services.

7. A medical care program by itself will not solve the health problems of the Nation. It must be coordinated with all efforts directed toward providing the people with adequate housing, a living wage, continuous productive and creative employment under safe working conditions, satisfying recreation, and such other measures as will correct conditions that adversely affect the physical, mental, and social health of the people.

8. There are areas on which the Planning Committee is not yet prepared to report. In the meetings of the Medical Care Section, differing views were expressed as to the method of effectuating the principle of prepayment or insurance. Some believe it can be achieved through voluntary plans. Others believe that a national health insurance plan is necessary.

In commenting upon the above points, Dr. E. Dwight Barnett, of Harper Hospital, states in *The Detroit Medical News* as follows: "It is evident that, if the medical profession is interested in keeping control of the voluntary health movement of this country, the voluntary prepayment plans must be strengthened; and that we must look to better education of the public of the accomplishments made by our present health system and also the voluntary Blue Cross and Blue Shield Commission programs so that the public will know more about our good points. We must work with labor unions, farm groups, etc., to meet their needs and to let them know the values of the voluntary system. Physicians should all obtain the report of the Brookings Institute entitled 'The Issue of Compulsory Health Insurance' available from the Brookings Institute, Washington 6, D. C., for facts in favor of the voluntary health movement."

The other Sections of the Assembly considered a large number of problems, of which shortages in the number of medical schools, physicians, practical nurses, registered nurses, and research workers were only a few. *The Connecticut State Medical Journal* summarizes the Assembly as a whole as follows: "The specific recommendations of so large a group are too numerous to be recounted here. More important than the recommendations was the atmosphere of the Assembly. Trained workers with fundamentally divergent political and economic viewpoints gathered with a unity of spirit in seeking a common goal, the improvement of the Nation's health. It was generally felt that the areas of agreement between the various groups were larger than had been anticipated in advance."

The Kentucky Medical Journal reports that there was some criticism of the delay with which voluntary prepayment plans were being developed, and that the A.M.A. was the target of criticism by some of the consumer groups.

To quote the Kentucky Journal further: "the entire situation was relieved by the final report in summing up the activities of the assembly by Mr. Quincy Howe, of the Columbia Broadcasting System. In regard to the American Medical Association his report is quoted:

" 'Some laymen may feel that the American Medical Association has been somewhat slow in coming around to health insurance and to the idea of government aid for health. But look at it from the doctor's point of view: Like all of us, doctors are creatures of habit, and they have learned their habits in about the hardest way there is. Just try to change some of your own habits. Try to stop smoking the way I did; or try pulling up stakes; try going to live in a new community, changing your profession—it isn't easy.

" 'Those of us who have been impatient with the American Medical Association for resisting change show a sad lack, I think, of understanding of human nature. Doctors have to make so many sacrifices. They submit themselves to so many disciplines, they are so overworked just keeping up with their own jobs that the wonder to me is that any of them have time for anything else. And it is only natural that those who do interest themselves in something beyond their engrossing daily tasks want to hold on to their own tried and tested way of doing things.

" 'That so many doctors not only have taken the time to work with the National Assembly but have shown themselves so cooperative, so understanding, so open-minded, seems to me the most promising and the most important development of this whole meeting.' "

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The Passano Award

Dr. Helen B. Taussig, associate professor of pediatrics, and Dr. Alfred Blalock, professor of surgery at Johns Hopkins University Medical School, have been selected as the recipients this year of the Passano Award. The presentation is made in recognition of their joint work in developing the "blue baby" operation. Since the operation was first performed in 1944, more than 600 patients from all over the world have been operated upon in their clinic alone.

The award, which consists of $5,000 cash, is made annually by the Williams and Wilkins Company, medical publishers of Baltimore, to aid in the advancement of medical research. Previous winners have been Dr. E. J. Cohn, of Harvard, for his work on fractionation of blood; Dr. Ernest Goodpasture, of Vanderbilt, for virus culture by the chick embryo method; and Dr. Selman Waksman, of Rutgers, for discovery of streptomycin.

EFFECTS OF INFECTIOUS DISEASES AND TRAUMA ON BODY PROTEIN

There are two large groups of disorders which produce generalized protein breakdown: *infections*, acute and chronic, and *trauma*. Infections usually produce fever. A rise in temperature of one degree Fahrenheit means a seven to ten per cent rise in metabolic rate. In addition, bacterial toxins may cause protein breakdown by affecting the cells directly. For these reasons. loss of weight is an outstanding feature of infectious diseases. Diet, especially during convalescence, is therefore high in calories and in the *proportions of protein*. Certain types of injury produce an intense protein *breakdown* which may last for several weeks. The negative nitrogen balance which follows injury is difficult to counteract. *Extremely high protein intakes* are needed to minimize the loss of body tissue.*



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What's Going On In Indiana by the Executive Secretary

Top A.M.A. Officers to Be Guests. The annual banquet of the Indiana State Medical Association in the Murat Temple, Indianapolis, Thursday night, October 28, 1948, will be unusual in that both the president and president-elect of the American Medical Association will be in attendance. Dr. Roscoe L. Sensenich, of South Bend, the president, and the Dr. Ernest E. Irons, Chicago internist and the president-elect, will be the distinguished guests. Doctor Irons accepted an invitation to be principal speaker. It is a long-established custom for the ISMA to invite the president-elect of the A.M.A., immediately upon his election, to speak at the annual banquet. The "Indiana custom" is so widely known around A.M.A. meetings that the president-elect anticipates it. When approached after his election by the House of Delegates in Chicago in June, Doctor Irons said: "I've heard that Indiana always invites the president-elect to be its banquet speaker." When given the date, he replied: "I'll be glad to come. Your association's invitation to the president-elect is a nice tradition and I wouldn't want to break it."

—ISMA—

Information on State Society Activities. A questionnaire was mailed to secretaries of the forty-seven other state medical societies by headquarters office several months ago asking for information on four subjects. Believing that the recapitulation of answers would be of interest to our membership, the Executive Committee directed that it be published. It follows:

(1) Does your society offer health and accident insurance for its members?

Yes, by commercial carrier	16
Yes	1
No	29
No answer	1
	47

(2) Do you have malpractice insurance coverage for your members?

Yes, with commercial carrier	18
Yes	5
No	24
	47

(3) Does your society provide legal counsel for members sued for malpractice?

Yes	18
No	29
	47

(4) Do you pay expenses of your delegates to the American Medical Association House of Delegates meetings?

Yes	43
No	3
Only to interim sessions	1
	47

Patients Present Physician With Car. Dr. Milo M. Aiken, of Plainfield, is driving a new Plymouth. Not much significance in that, you are likely saying to yourself, but in this case there is. Doctor Aiken's patients noticed that his automobile was getting old, so they began recalling how he had always taken care of them; how he had visited their homes night and day when they needed him; how service was always foremost in his mind; and out of the conversation developed a campaign to buy Doctor Aiken a new Plymouth. It was done quietly. More than a thousand dollars was collected, and on June 19—the day before Father's Day—the Plymouth dealer presented it to the surprised doctor. It's our guess Plainfield offers no market for government-controlled medicine.

—ISMA—

Special Draft of Physicians Defeated. Indiana physicians should be grateful for the work of the Committee on Public Policy and Legislation in helping defeat the provision in the Selective Service Bill which would have subjected all physicians, dentists and veterinarians up to 45 years of age to "special calls." The committee protested vigorously against this provision of the bill upon the ground that it was discriminatory and reflected upon the patriotism of physicians by inferring they would not volunteer for military service in time of national emergency. Indiana senators and representatives were contacted when they were in Indianapolis for their respective party conventions, and letters and telegrams were sent to them emphasizing the unfairness of the "special call." This feature of the bill was eliminated with votes of Hoosier solons helping to defeat it. The bill, as passed, subjects physicians up to 25 years of age to call. The young men deferred from actual service in World War II because they were in medical or dental school under the Army Special Training Program and the Navy V-12, and who received their professional education at least partially by government subsidy, but who never repaid this aid by any actual service, will be drafted. This group numbers about 13,000 physicians.

—ISMA—

This and that: The total raised in Indiana in 1948 for the local chapters and National Foundation for Infantile Paralysis amounted to $399,-118.25, exceeding last year's total by $34,666.86.



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News Notes

Dr. W. A. Browne, of Richmond, Virginia, has been appointed as city-county health director at Evansville. He has had a wide range of public health experience in Detroit, in New York, and in Virginia.

Dr. Jesse C. Benz, of Marengo, was recently appointed County Health Officer.

Williamsport has recently acquired two new physicians. Dr. James Crane, of Frenchburg, Kentucky, recently moved to Williamsport, as has Dr. P. H. Schmiedicke, of Indianapolis.

Dr. Jack Walker, of Plainfield, and Dr. John Shively. of Muncie, have moved to Knightstown, to take over the practice of Dr. A. F. Craig there, while he takes a year's leave of absence for special training in anesthesiology at the Indiana University Medical Center. Doctor Craig plans to return to Knightstown at the end of the year, and Doctors Shively and Walker expect to remain there, also.

Dr. John H. Grant, formerly of Evansville, has opened an office in Cynthiana for the general practice of medicine. A graduate of Indiana University School of Medicine in 1947, Doctor Grant recently completed his internship at St. Margaret Hospital in Hammond.

Announcement was made recently of the advancement of Dr. Carl P. Huber, of Indianapolis, to the chairmanship of the new Department of Obstetrics and Gynecology at the Indiana University School of Medicine. The appointment confers on Doctor Huber the rank of professor. He has been a staff member of the medical center for approximately ten years.

Dr. B. E. Lemmon, of Cloverdale, has opened an office for the general practice of medicine in Greencastle.

Dr. John E. Mackey, of Evansville, has moved to Rockport, where he has opened an office for the practice of medicine. He is a graduate of the Indiana University School of Medicine, in 1944, and took his internship and residency at the Methodist Hospital, in Indianapolis. Following this he spent two years with the armed services.

Dr. J. S. Noblitt has accepted a position as full-time physician at the Rockville Sanitarium.

When Dr. John R. Porter, II, joined his father in the practice of medicine in Lebanon recently, the fourth generation began serving the medical needs of that community. His great-grandfather, Dr. Albert G. Porter, and his grandfather, Dr. John R. Porter, preceded his father in practice in Lebanon. The father and son are beginning a second century in the unbroken family line of physicians.

Miss Geraldine Moore and Dr. Robert L. Parr, both of Indianapolis, were married in Fairview Presbyterian Church in Indianapolis on June 20. The bride is the daughter of Mr. and Mrs. H. H. Moore, of Bunker Hill, and is a graduate of General Hospital School of Nursing, in Indianapolis. Doctor Parr is the son of Mr. and Mrs. R. Lowell Parr, of Indianapolis, and is a graduate of Indiana University School of Medicine.

Dr. Harris B. Schumacker, Jr., of New Haven, Connecticut, a member of the Yale Medical School staff, was recently appointed professor and chairman of the Department of Surgery at Indiana University School of Medicine. He has also served on the medical staffs of Johns Hopkins Hospital and Mayo General Hospital. Doctor Schumacker is a veteran of World War II, in which he served as a colonel on the staff of General MacArthur in the southwest Pacific.

Formerly of Woodburn, Dr. Jordan C. Ringinberg began the practice of medicine in Gary recently, as an associate of Dr. A. A. Watts. For the past two years he has been serving as flight surgeon with the 20th Air Force in the Mariana Islands.

Dr. Karl C. Kohlstaedt has opened an office for the general practice of medicine at 3660 West Sixteenth Street, in Indianapolis. Doctor Kohlstaedt graduated from the University of Cincinnati College of Medicine in 1944, and served his internship at Indianapolis General Hospital. Following this, he went into the Navy, where he served for approximately fourteen months.

Dr. W. C. Robertson, a 1945 graduate of Indiana University School of Medicine, has opened an office for general practice at 2725 S. Calhoun Street, in Fort Wayne. Doctor Robertson spent twenty-one months in service at the Huntington, West Virginia Veterans Hospital.



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*Rubin, M. I., in: Mitchell-Nelson Textbook of Pediatrics, 4th ed., p. 1261, Saunders 1945.



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WHEN MILK BECOMES FORBIDDEN FOOD MULL-SOY

Warren C. Lewis, M.D., has opened an office at 114 E. Garro Street, in Plymouth, for the practice of internal medicine and cardiology. He is a graduate of the University of Nebraska Medical School. After internship in Hollywood Presbyterian Hospital, Los Angeles, California, he was associated with Dr. Paul H. Moore, internist of that city. Dr. Lewis has recently completed a three-year residency in medicine at St. Louis City Hospital, St. Louis. For the past year he has been associated with the St. Louis City Infirmary Heart Station in the study of aging, conducted by the Division of Gerontology of Washington University. The Division reported research findings in an exhibit at the recent A. M. A. meeting in Chicago.

BRUCELLOSIS GRANT IS APPROVED

Research in brucellosis in Indiana will continue for at least another year, as the National Advisory Health Council, Washington, D. C., has recently approved a renewal of the grant-in-aid for this project.

The project is carried on jointly between the Indiana State Board of Health, Purdue University, the Bureau of Animal Industry, United States Department of Agriculture, and the United States Public Health Service.

SCHOOL AND COMMUNITY HEALTH WORKSHOP

Physicians and physicians' wives are invited to attend the fifth annual School and Community Health Workshop which will be held at Bloomington, from August 13 to 26, 1948. The Indiana State Medical Association will be one of the cooperating groups this year.

The state association procured Dr. Fred V. Hein, consultant in health and fitness, Bureau of Health Education, American Medical Association, to speak on "Trends in the School Health Program," at 3:00 P.M. on Monday, August 16.

Mr. Ray E. Smith, executive secretary of the state association, will serve as moderator of an hour and a half program which the association will sponsor on Saturday morning, August 21. "Facilities and Personnel Needed to Carry Out a Health Program," will be discussed by a panel of six, beginning at 10:00 A.M., followed by questions from the audience. Participating in the panel will be Dr. A. P. Hauss, of New Albany, president-elect of the state association; Miss Leona Adam, of Tell City, president of the Indiana State Nurses Association; Mr. Robert Yoho, of Indianapolis, director of the Bureau of Health Education, Records and Statistics of the State Board of Health; Dr. L. E. Burney, of Indianapolis, state health administrator; Mr. Robert E. Neff, of Indianapolis, superintendent of Methodist hospital; and Mrs. Clotilde Sanguinet, of Indianapolis, director of health education, Indiana Tuberculosis Association.

The workshop program will be conducted on central standard time, which is in effect in Bloomington.

AMERICAN COLLEGE OF PHYSICIANS RESEARCH FELLOWSHIPS

The American College of Physicians announces that a limited number of Fellowships in Medicine will be available from July 1, 1949-June 30, 1950. These Fellowships are designed to provide an opportunity for research training either in the basic medical sciences or in the application of these sciences to clinical investigation. They are for the benefit of physicians who are in the early stages of their preparation for a teaching and investigative career in Internal Medicine. Assurance must be provided that the applicant will be acceptable in the laboratory or clinic of his choice and that he will be provided with the facilities necessary for the proper pursuit of his work. The stipend will be from $2,200 to $3,200. Application forms will be supplied on request to The American College of Physicians, 4200 Pine Street, Philadelphia 4, and must be submitted in duplicate not later than November 1, 1948. Announcement of the awards will be made as promptly as possible.

Doctors Meredith B. Flanigan, of 1701 North Illinois Street, and Harold T. Moore, of 3211 North Sharon Avenue, both of Indianapolis, recently made the announcement that they were entering the private practice of anesthesiology. Doctor Flanigan recently completed a residency at the Methodist Hospital, and Doctor Moore completed his residency at the Indiana University Medical Center. They have not opened an office, but are conducting their practice from their homes.

Following his release from the Army in May, Dr. James A. Alford has opened an office for the practice of medicine in Hamilton. He is a graduate of Indiana University School of Medicine, and he served his internship at the St. Barnabas Hospital in Minneapolis. He was stationed at the Veterans Hospital in Danville, Illinois, for two years during his service with the Army.

Dr. James H. Stygall, Indianapolis, is now a member of the Executive Committee and was elected Regent-at-Large for Indiana and Illinois of the American College of Chest Physicians at the 14th Annual Meeting of the College held in Chicago, Illinois, June 17-20. Fifty-two candidates took their oral and written examinations for Fellowship in the College on June 17, at the annual meeting. The total registration at the meeting was 785 with physicians attending from 43 states.

Having just completed a two year medical residency at the Veterans Hospital in Indianapolis, Dr. Ottis N. Olvey has opened an office for the practice of internal medicine at 3809 Central Avenue, in Indianapolis. Doctor Olvey graduated from the Indiana University School of Medicine in 1941, and then spent approximately four years in the Army. During a tour of duty in the Aleutians, he was assistant base surgeon for the 11th Air Force.



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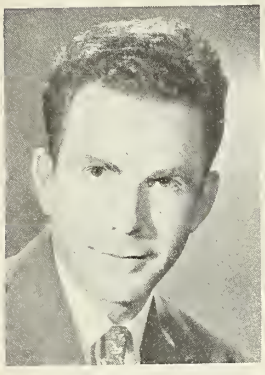
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MEDICAL SCHOOL SCHOLARSHIP



Charles E. Sheets, 310 Jackson street, Anderson, recently was awarded a $2,000 scholarship by the Indiana State Medical Association. He will enter the Indiana University School of Medicine in September.

Mr. Sheets is the son of Mrs. Arthur C. Sheets and took his premedical training at Anderson College.

The scholarship pays $500 a year for four years. Upon completion of his internship, Mr. Sheets agreed to practice medicine for five years in some Indiana community in need of medical service.

NURSING SCHOOL SCHOLARSHIP

Nursing school scholarships have been awarded to Miss Betty Jeanne Hayes, 7950 Lafayette Road, Indianapolis, and Miss Mary Virginia Moore, 2614 Garfield Avenue, Terre Haute, by the Indiana State Medical Association. The scholarships are worth $500 each.

Miss Hayes, who will take her training at St. Vincent's hospital in Indianapolis, is the daughter of Mr. and Mrs. Alvin F. Hayes. Her scholarship is being financed by Mr. and Mrs. H. C. Krannert, of New Augusta.

Miss Moore will take her training at St. Anthony hospital in Terre Haute. She is the daughter of Mr. and Mrs. Lofton M. Moore.

Dr. Hilbert H. DeLawter, who has been associated with the Menninger Foundation in Topeka, Kansas, is now at Sterne Memorial Hospital, in Indianapolis.

Richard A. Theye, 3301 Bowser street, Fort Wayne, has been presented with a gold medal by the Indiana State Medical Association in recognition of the fact that he led the 1948 graduating class of the Indiana University School of Medicine in Scholarship.

A silver medal went to Martin H. Wortzel, 321 18th avenue, Newark, N. J., who was second, and a bronze medal was won by Max E. Chervin, 1320 W. Eleanor street, Philadelphia, who was third in his class.

The medals are in the shape of the State of Indiana and are of the watch chain type. Dr. Cleon A. Nafe, president of the medical association, said the medals were awarded to "give deserved recognition for scholastic attainment and to encourage underclassmen to be more diligent in their studies."

Drs. Beeler, Collins and Loehr, 712 Hume Mansur Building, Indianapolis, have announced that due to extensive repairs and the installation of new equipment, their office will be closed from August 16 to September 7.

The American Society of Anesthesiologists, Inc., will hold its annual meeting in St. Louis, on November 4, 5 and 6. In addition to a comprehensive scientific program, there will be technical and scientific exhibits of unusual interest. Reservations may be made by writing to Mr. Alumbaugh, Office Manager, Statler Hotel, St. Louis.

Dr. Byron W. Kilgore has opened an office at 3133 East 38th Street, in Indianapolis, for the general practice of medicine, with special attention to gastro-enterology. A graduate of Indiana University School of Medicine in 1938, Doctor Kilgore spent forty months in the Army, a year of which was served overseas, as medical officer with the XX Corps in the ETO. He interned in the Medical Center Hospitals, and had a fourteen months' Fellowship in gastro-enterology at Indianapolis General Hospital. He took postgraduate work in psychiatry in England. Since his release from service, Doctor Kilgore has been associated with Drs. Ensminger and Norman, in industrial medicine.

MEDICAL OFFICER EXAMINATION

The U. S. Civil Service Commission has announced an examination for filling Medical Officer (Rotating Intern and Psychiatric Resident) positions in St. Elizabeths Hospital, Washington, D. C.

Medical Officers (Rotating Intern) are paid $2,200 for the first year and $2,400 for the second year. Medical Officers (Psychiatric Resident) are paid from $2,400 to $4,100 a year, depending upon the amount of approved postgraduate training the applicant has completed. Appointments are open for July 1, 1949. Internships consist of two years of rotating service, and Psychiatric Residencies consist of one to three years in psychiatry. To qualify for Internships applicants must be third or fourth year students in an approved Medical School; however, they may not enter on duty until they have successfully completed the full course of study. Applicants for Psychiatric Residencies must be graduates of an approved medical school, with the degree of doctor of medicine, and, in addition, they must have completed an approved internship or must now be serving such an internship. No written test is required for the Medical Officer positions. Details about the requirements are given in the examination announcement.

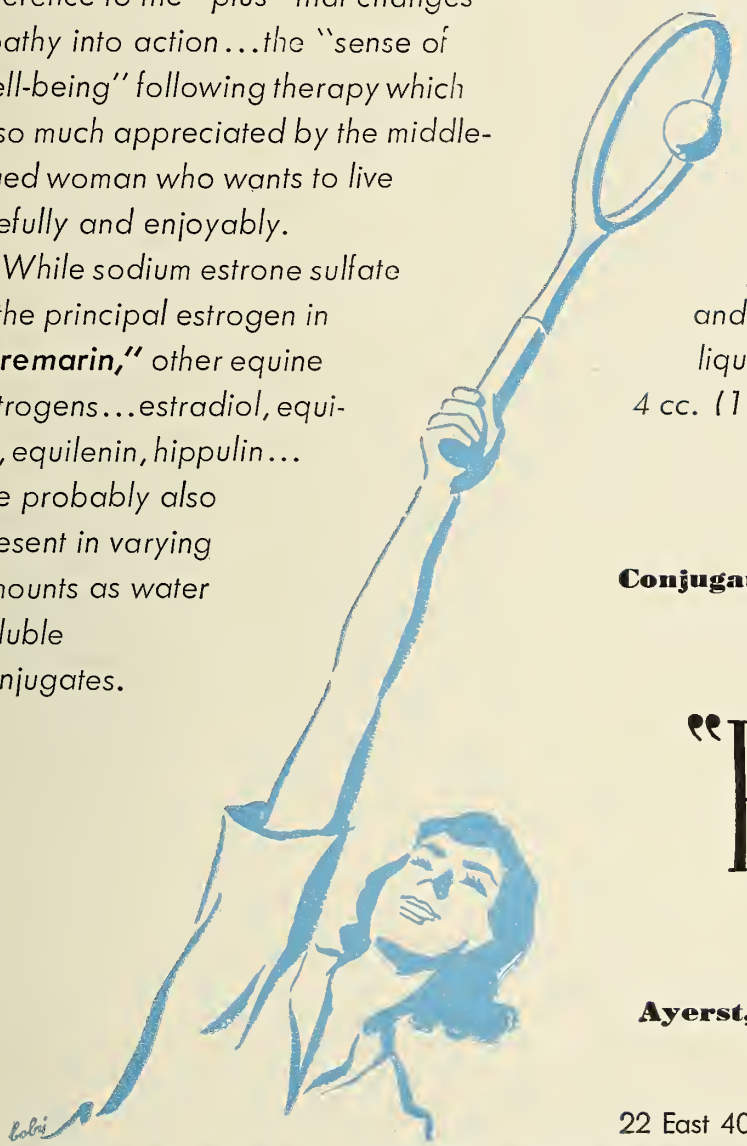
Interested persons may secure information and application forms from the U. S. Civil Service Commission, Washington 25, D. C., from most first and second-class post offices, and from Civil Service regional offices. Applications will be accepted until further notice in the Commission's Washington office.

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Deaths

Elmer E. Allenbaugh, M.D., of Dale, died on June sixth after a long illness. He had reached the age of eighty-seven. He was a graduate of the Cincinnati College of Medicine and Surgery in 1888. Doctor Allenbaugh retired from practice a short time before his death.

* * *

James W. Benham, M.D., of Columbus, a member of the Fifty-Year Club, died on June twenty-sixth at the age of eighty. A graduate of the Louisville Medical College in 1896, Doctor Benham limited his practice to otolaryngology. In World War I he served as a captain in the Medical Corps. Doctor Benham was a member of the Bartholomew-Brown County Medical Society, the Indiana State Medical Association and the American Medical Association.

* * *

Elmer E. Mace, M.D., of New Palestine, died on July first. He was seventy years of age. Doctor Mace was a graduate of the Medical College of Indiana, Indianapolis, in 1902. He was a veteran of World War I. Doctor Mace was a member of the Hancock County Medical Society and the Indiana State Medical Association, and a Fellow of the American Medical Association.

* * *

James H. Morrison, M.D., of Hartsville, died on June twenty-ninth. He was eighty-one years of age. Doctor Morrison was a graduate of the Kentucky School of Medicine, in Louisville, in 1893, and had retired from medical practice in 1918.

* * *

James B. Stalker, M.D., of Indianapolis, died at the age of seventy-two on July sixth. Doctor Stalker graduated from the University of Louisville School of Medicine in 1898, and had been a general practitioner for fifty years. He was a veteran of World War I, having served overseas with the Army Medical Corps. Doctor Stalker was a member of the Indianapolis (Marion County) Medical Society, the Indiana State Medical Association and the American Medical Association.

* * *

Walter W. Wright, M.D., of New Castle died on June seventeenth after a brief illness. He was sixty-five years of age. Doctor Wright was a graduate of the Indiana University School of Medicine in 1908. He had practiced in New Castle since returning from service in World War I. Doctor Wright was a member of the Henry County Medical Society and the Indiana State Medical Association, and was a Fellow of the American Medical Association.

James M. Jenkins, M.D., of Cortland, died at the age of eighty-three after fifty-eight years of practice. Doctor Jenkins graduated from the Kentucky School of Medicine, Louisville, in 1891.

* * *

Dr. Ralph William Kraft, of Hobart, was accidentally killed on June twenty-fourth at Evergreen Lodge in Canada, where he had gone for a fishing and vacation trip. The tragedy occurred when an eleven-year-old boy, a guest at the lodge, took down a gun from a wall display rack, and then backed into the wall. The impact caused the gun, supposedly unloaded, to discharge, and Doctor Kraft, who was standing directly in the line of fire, received the full force of the blast. He died immediately. Doctor Kraft was thirty-eight years of age. He was a graduate of the Indiana University School of Medicine, in 1936, and had practiced in Hobart for the past nine years. Doctor Kraft was a member of the Lake County Medical Society and the Indiana State Medical Association, and was a Fellow of the American Medical Association.

* * *

Harry Merrill Brown, M.D., of Indianapolis, was injured critically in a two-car collision and died four days later on July third without regaining consciousness. He was thirty-three years of age. Doctor Brown was a deputy coroner and it was while on a run to investigate a death that his car was struck by a taxicab, fatally injuring him. Doctor Brown had survived the infamous Bataan Death March and three years' captivity by the Japanese. During his captivity he cared for fellow prisoners and Filipinos, and started work on a skin grafting instrument, which he perfected a short time ago. After Doctor Brown was captured his wife, Mrs. Irene Phillips Brown, then a nurse in General Hospital, joined the Army Nurse Corps and was sent to the China-Burma-India Theater where she flew with wounded over the "Hump." She had been on duty there almost a year when she learned that her husband was alive and had been rescued by American Rangers. By special permission she was flown immediately to San Francisco to meet Doctor Brown. They returned to Indianapolis where Doctor Brown entered two years' service as resident surgeon at General Hospital. Six months ago he began private practice. Doctor Brown was a graduate of the Indiana University School of Medicine in 1939. He was a member of the Indianapolis (Marion County) Medical Society, the Indiana State Medical Association and the American Medical Association.

Society Reports

INDIANA STATE MEDICAL ASSOCIATION

EXECUTIVE COMMITTEE

June 13, 1948.

Roll call showed the following present: C. H. McCaskey, M.D.; chairman; Walter L. Portteus, M.D.; Cleon A. Nafe, M.D.; A. P. Hauss, M.D.; Alfred Ellison, M.D.

Guests: A. F. Weyerbacher, M.D., treasurer; Frank B. Ramsey, M.D., associate editor of THE JOURNAL; Albert Stump, attorney; C. A. Stayton, M.D., chairman, Committee on Cancer, and Ray E. Smith, executive secretary.

Membership Report

Number of members June 12, 1948	3,584*
Number of members June 12, 1947	3,494
Gain over last year	90
Number of members Dec. 31, 1947	3,618

* Includes 53 in military service (gratis)
177 honorary members

Woman's Auxiliary

On motion of Drs. Ellison and Portteus, the program suggestions for 1948-1949, submitted by the program chairman of the Woman's Auxiliary, were approved.

Indiana Cancer Society

The chairman of the Committee on Cancer of the Indiana State Medical Association reported on the status of diagnostic clinics proposed by the Indiana Cancer Society.

On motion of Drs. Portteus and Ellison, the Executive Committee concurred in the action of the committee on Cancer taken May 26, 1948, in disapproving the request of the Elkhart County Cancer Society to purchase radium to be owned by the Elkhart County Medical Society.

Action to approve a notice concerning the diagnostic clinic program of the Indiana Cancer Society, which is proposed to be sent to presidents and secretaries of county medical societies, medical staffs and hospital superintendents in cancer diagnostic center areas, was deferred until the next meeting of the Executive Committee, on motion of Dr. Portteus and Ellison.

Statements of receipts and expenditures for May for the association and THE JOURNAL were approved.

Treasurer's Office

The treasurer of Mutual Medical Insurance, Inc., (also treasurer of the Indiana State Medical Association) gave a report on the financial status of Mutual Medical Insurance, Inc.

1948 Annual Session, Indianapolis, October 26, 27 and 28, 1948

Scientific program. Motion was made by Drs. Ellison and Hauss that Drs. McCaskey, Nafe and Portteus, and the executive secretary confer with the Committee on Scientific Work regarding the arrangement of the scientific program.

Invitation to Sao Paulo, Brazil, physician. In reply to a request received from Dr. J. Avelino Chaves of the Faculty of the University of Sao Paulo, Brazil, for an invitation to attend the annual session of the Indiana State Medical Association, the executive secretary was instructed to write Doctor Chaves to the effect that the association will be glad to have him attend the October meeting, but the secretary is not to make the invitation appear that Doctor Chaves is coming to the United States on special invitation of the state association.

Scientific exhibit. Letter received from the chairman of the Committee on Scientific Exhibit, suggesting that a cash allotment be made to the exhibitors to help defray their expenses was read, but no action taken.

Illinois Medical Society exhibit. Pictures of an exhibit on organization and activities of the Illinois State Medical Society, shown at the recent annual session of the Illinois Society in Chicago, were reviewed, and the executive secretary was instructed to see whether a similar exhibit can be prepared for the Indiana 1948 meeting.

Action on the request of the Indiana Academy of General Practice for space at the 1948 meeting was deferred until the next meeting of the Executive Committee, at which time the secretary-treasurer of the academy will be invited to appear before the committee.

Legislative Matters

National

The executive secretary gave a brief report of the activity of the Oregon State Medical Society in the recent Dewey-Stassen primary.

Organization Matters

Honorary membership nominations. The method used in 1947 for presentation to the House of Delegates of the names of members eligible to honorary membership was approved for 1948.

Fifty-Year Club. The committee approved presentation of awards to the Fifty-Year Club members at the annual dinner.

Field secretary. On motion of Drs. Hauss and Ellison, a subcommittee, composed of Drs. Nafe, McCaskey and Portteus, and the executive secretary, was authorized to review the applications for the field secretary position and to make recom-

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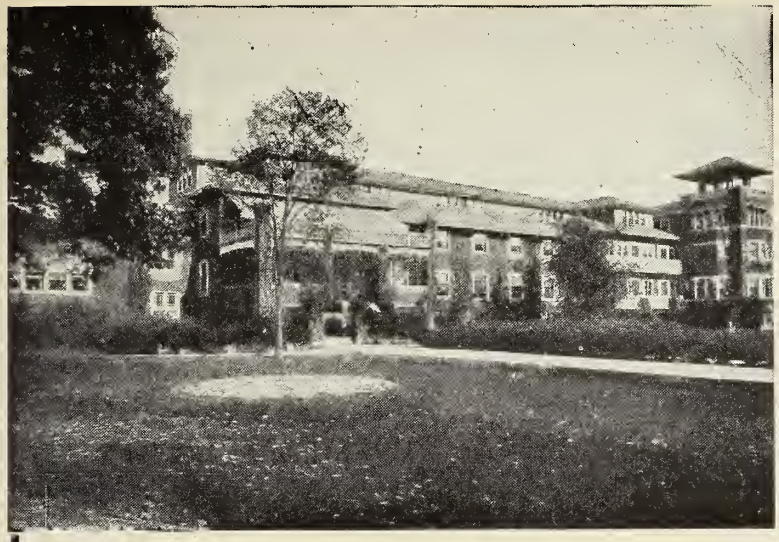
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mendations at the next meeting of the Executive Committee.

General practitioner award. The committee agreed upon a painting by an Indiana artist, with appropriate inscription attached to the frame, as the award for 1948, the picture to cost not more than $50.00, and the selection to be made by the president, treasurer and executive secretary.

Information from state medical societies. On motion of Drs. Portteus and Ellison, a recapitulation of the answers to the questionnaire sent to each of the state medical societies is to be published in THE JOURNAL, and a copy of the results of this survey is to be sent to the state secretaries along with a letter of thanks for their cooperation. The questionnaire requested information regarding health and accident and malpractice insurance coverage for state society members, provision of legal counsel for members sued for malpractice, and payment of expenses of delegates to the American Medical Association House of Delegates' meetings.

Payment of A.M.A. delegates' expenses. On motion of Drs. Portteus and Ellison, the Executive Committee voted to recommend to the Council that beginning in 1949 the delegates from Indiana to the A.M.A. House of Delegates be paid their railroad fare, including Pullman, plus $10.00 per diem.

American Physicians Art Association. On motion of Drs. Hauss and Portteus, a resolution which Dr. William Cockrum, A.M.A. delegate, proposes to introduce in the House of Delegates, praising the American Physicians Art Association upon its tenth anniversary, was approved.

Indiana Social Hygiene Association. A $10.00 sustaining membership in the Indiana Social Hygiene Association was voted, upon motion of Drs. Ellison and Portteus.

Compulsory attendance at medical meetings. The executive secretary read a letter from the Indianapolis Medical Society, saying that word changes suggested by the Executive Committee in the resolution adopted by the Indianapolis Society regarding compulsory attendance at medical meetings had been made.

Public Relations News Letter

Design for a news letter which the Committee on Public Relations proposes to issue was approved with the suggestion that the word "News" be added to the letterhead making it read, "I.S.M.A. News Flashes."

Medical Economics

Letter from the office of the secretary of the American Medical Association explaining why the hospital and sickness coverage for employees was not renewed with the Blue Cross was read. Some of the considerations which caused the A.M.A. to select the new plan follow:

1. Hospitalization and medical and surgical fees are covered in one policy instead of two.

(Continued on page 866)

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(Continued from page 865)

2. The new policy rate is cheaper by twenty-seven cents per month per employee, although family coverage is a little higher. (When the Blue Cross' new raise is effective, the new policy will be still cheaper.)

3. The rate is guaranteed to remain stable for the life of the contract.

4. The employees benefit by any saving made if our experience warrants it.

5. The coverage compares favorably with the former plan. For instance, the plan provides for a greater number of hospital days and the number of days is based on each hospital admission rather than on a calendar year.

Fans for Headquarters Office

On motion of Drs. Portteus and Ellison approval was given for the purchase of two electric fans for the headquarters office.

State Highway Maps

The committee authorized mailing of the new official Indiana highway map to members providing the State Highway Commission will supply the maps and envelopes gratis.

The Journal

Report on advertising:

Increase in June	$ 224.60
Decrease	188.70
Total increase, June	$ 35.90
Total increase for year	$1,318.88

On motion of Drs. Ellison and Portteus and on recommendation of the executive secretary, the use of envelopes in mailing THE JOURNAL is to be discontinued except where only one copy goes to a postoffice. It is estimated that this will save approximately $400 a year.

The committee voted that journals be exchanged with "Excerpta Medica," published in Amsterdam, and "The Philippine Medical World," published in Manila, P. I.

Request of Arbee Agency, Inc., Terre Haute, for space to advertise Speas Apple Brandy was disapproved, upon motion of Drs. Portteus and Hauss.

There being no further business, the meeting adjourned, to meet again at 6:30 p. m., Saturday, July 10, 1948, at the Columbia Club, Indianapolis.

COMMITTEE ON PUBLICITY

June 11, 1948

Present: Homer G. Hamer, M.D., chairman; James O. Ritchey, M.D.; Marlow W. Manion, M.D.; Cleon A. Nafe, M.D., and Ray E. Smith, executive secretary.

A "Hints on Health" column entitled, "Colored Glasses," for release the week of July 19, 1948, was approved.

A news release on Ohio physicians' participation in the annual A.M.A. session was noted. It was agreed that our policy of sending articles to In-

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dianapolis papers and press associations during the A.M.A. session should be continued.

The secretary was directed to write *Nation's Business* for a price on two hundred reprints of Dr. Maurice Friedman's article, "Doctor, My Statistics Feel Funny," which appeared in the May issue.

An article entilted, "My Plan for Health Insurance," written by Governor Warren of California and appearing in the June 22 issue of *Look* Magazine, was reviewed.

Speakers supplied:

June 16, 1948—Rotary Club, Columbia City. "The Modern Physician."

LOCAL SOCIETY REPORTS

Clinton County Medical Society members met at the Clinton County Hospital, in Frankfort, on June first. Thirteen members attended the meeting.

Elkhart County Medical Society members held a joint meeting with the Woman's Auxiliary on June third, at the South Shore Hotel, at Lake Wawasee. Eighty-nine members and guests were present.

Fayette-Franklin County Medical Society members held a meeting at Mound Camp, near Brookville, on June eighth. Dr. William A. Thompson, of Liberty, discussed the pending chiropractic bill. Forty members and guests were present at this meeting.

Gibson County Medical Society members met at The Emerson Hotel, in Princeton, on June fourteenth. Guest speakers were Dr. Charles N. Combs, of Terre Haute, whose subject was "The Use and Abuse of Pentothal Sodium," and Dr. R. E. Edmondson, of Terre Haute, who spoke on "Anesthesia Experience in World War II." Twenty members were present.

Hamilton County Medical Society members held a meeting at Forest Park Inn, in Noblesville, on June eighth. Dr. James Browning, of Indianapolis, spoke on "Management of Various Types of Arthritides." Twenty members attended this meeting.

WOMAN'S AUXILIARY to the Indiana State Medical Association

President-elect—Mrs. William Morrison, Kokomo.

President-elect—Mrs. Truman Caylor, Bluffton.

Corresponding Secretary—Mrs. Charles Viney, Logansport.

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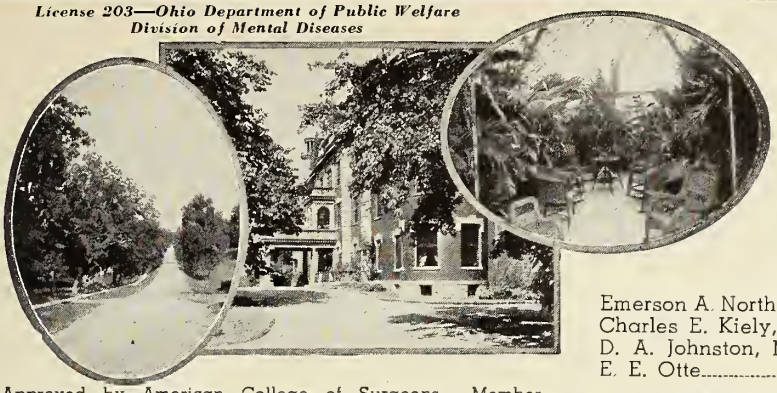
The first event which I attended was the opening tea honoring Mrs. Eustace A. Allen, president, and Mrs. Luther H. Kice, president-elect of the Woman's Auxiliary. Hostesses were the Auxiliaries to the Illinois State Medical Society and the Chicago Medical Society. This was a very nice affair, well attended, and everyone seemed to have a good time. Much approval was expressed that this party was open to all auxiliary members for the first time.

The address of welcome on Tuesday morning was given by Mrs. John Soukup, immediate past president of the Illinois State Auxiliary. It was a noteworthy speech. Among the officer's reports, Mrs. Arthur A. Herold, treasurer, mentioned Indiana as having the largest membership-at-large (130); Mrs. Leo Schaefer, second vice-president, in charge of our district, reported an increase of nearly 3,000 members and two new states with no red dots (i.e. an auxiliary or member-at-large in every county), one of which was Indiana. Our state had an increase of 400 members, which was as great as any state, on a percentage basis.

Besides the reports of officers and chairmen on Tuesday afternoon, election of the nominating committee for next year was the chief item of business. Among many names nominated, five were selected from the assembly by ballot. The

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group from Indiana got together, behind my back, as it were, and nominated your president, which resulted in my being one of the five elected.

On Wednesday morning Mrs. S. J. Petronella, East Chicago, read the report of the Resolutions' Committee, which was followed by an impressive memorial service for the deceased members. I was amazed at the length of the list, which ran up into several hundred. Indiana reported twelve, and even as the list was being read, we had lost another.

Everyone anticipated a heated discussion on the matter of raising the dues, and whether or not the publication or publications would be included in the national dues. It was decided to raise the dues from 25 cents to one dollar, and the matter of if and when the publications are to be included was left to the advisory council.

Mrs. A. W. Ratcliffe, Evansville, immediate past president, gave her report in a very concise manner. This year we have added nine new auxiliaries and have a membership of over 1,700. One big achievement has been the publication of *The Hoosier Doctors' Wife.*

Dr. Morris Fishbein, editor of *The Journal of A.M.A.* and *Hygeia*, was the guest speaker at the luncheon on Tuesday, and seemed impressed that the auxiliary was approaching 50,000 membership. On Wednesday the guest speakers were Dr. Edward Bortz, president, and Dr. R. L. Sensenich, president-elect of the A.M.A., and other honored guests were officers and members of the advisory council.

Mayor Kennelly, of Chicago, and President Sensenich were the two outstanding speakers at the opening meeting of the A.M.A. on Tuesday evening. Many international physicians were introduced, several from South America.

An interesting feature was the exhibit of the works of the doctors turned artists. It would have taken a week to really see all the other exhibits at the Navy Pier.

Indiana was allowed 18 delegates and 17 alternates, and I am glad to report the following in attendance officially: Mesdames A. W. Ratcliffe, A. B. Scales, Evansville; S. J. Petronella, East Chicago; Truman Caylor, Homer B. Annis, Bluffton; Lawerence Shinabery, A. N. Ferguson, Fort Wayne; Frank Gastineau, Charles F. Voyles, Cleon A. Nafe, Bert Ellis, Indianapolis; F. S. Cuthbert, Kokomo; Henry Bopp, Stuart R. Combs, Terre Haute; Milton Gevirtz, Hammond; R. B. Stout, Elkhart; D. E. Lybrook, Galveston; F. H. Fargher, Victor Kling, Michigan City; Jules Heritier, O. F. Lehmberg, Columbia City. There may have been others whose names were not reported to me. On Wednesday morning the officers and chairmen of the board were guests of the state president for breakfast, and plans for the annual meetings were discussed. On Thursday morning I attended a postconvention conference of state presidents, presidents-elect and national officers and chairmen, at which Mrs. Kice presided.

One slogan was reiterated throughout the convention—"Every doctor's wife a member of the Auxiliary."

VIVIAN CLARK MORRISON,
State President.

Books

Books received are acknowledged in this column, and such acknowledgment must be regarded as a sufficient return for the courtesy of the sender. Selections will be made for more extensive review in the interests of our readers and as space permits. Books listed in this department are not available for lending. Any information concerning them will be supplied on request.

A HISTORY OF THE HEART AND THE CIRCULATION. By Fredrick A. Willius, M. D.; senior consultant in cardiology, Mayo Clinic; and Thomas J. Dry, M.A., consultant, section on cardiology, Mayo Clinic. 456 pages, with 170 illustrations. Cloth. Price $8.00. W. B. Saunders Company, Philadelphia, 1948.

TREATMENT OF HEART DISEASE. By William A. Brams, M.D., associate professor of medicine, Northwestern University Medical School. 195 pages with 11 illustrations. Cloth. Price $3.50. W. B. Saunders Company, Philadelphia, 1948.

THE HEALTHY HUNZAS. By J. I. Rodale, editor of Organic Gardening. 263 pages, with 16 illustrations and one color plate. Cloth. Price $2.75. Rodale Press, Emmaus, Pennsylvania. 1948.

PIONEER LIFE IN KENTUCKY. By Daniel Drake, M.D. Edited from the original manuscript, with introductory comments and a biographical sketch, by Emmet Field Horine, M.D. 257 pages, with 9 illustrations. Cloth. Price $4.00. Henry Schuman, Inc., New York, Publishers, 1948.

CORRELATIVE NEUROANATOMY. By Joseph J. McDonald, M.D., Joseph G. Chusid, M.D., and Jack Lange, M.D. Fourth edition, revised. 156 pages, with 60 illustrations. Paper. Price $3.00. University Medical Publishers, Palo Alto, California, 1948.

WHAT IS PSYCHOANALYSIS? By Ernest Jones, M.D. 126 pages. Cloth. Price $2.00. International Universities Press, New York, 1948.



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4	George A. May, Madison	Dec. 31, 1950
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10	William H. Howard, Hammond	Dec. 31, 1950
11	C. S. Black, Warren	Dec. 31, 1948
12	Paul A. Garber, South Whitley	Dec. 31, 1949
13	Alfred Ellison (Chairman), South Bend	Dec. 31, 1950

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6	Will A. Thompson, M.D., Liberty	Robert W. Kuhn, M.D., Wilkinson	Greenfield
7	Harry Murphy, M.D., Franklin	Donald E. Wood, M.D., Indianapolis	Franklin, September 22
8	Joseph H. Clevenger, M.D., Muncie	Ramon A. Henderson, M.D., Muncie	Muncie
9	George H. Warne, M.D., Tipton	George Compton, M.D., Tipton	Tipton
10	Neal Davis, M.D., Lowell	Frank G. Sink, M.D., Remington	Whiting, October 14
11	W. W. Holmes, M.D., Logansport	O. G. Brubaker, M.D., North Manchester	Kokomo, September 15
12	Benjamin F. Pence, M.D., Columbia City	Karl M. Beierlein, M.D., Fort Wayne	
13	A. A. Thompson, M.D., Tyner	O. E. Wilson, M.D., Elkhart	South Bend, Nov. 10

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[1] Forbes, E. B., and Swift, R. W.: J. Nutrition *27*:453 (June) 1944. [2] Forbes, E. B.; Swift, R. W.; Elliott, R. F., and James, W. H.: J. Nutrition *31*:203;213 (Feb.) 1946.

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THE TREATMENT OF HEMANGIOMA*

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INDIANAPOLIS

CONGENITAL hemangioma, or "birthmark," is a lesion familiar to all physicians. It is a benign lesion, a localized hyperplasia of vascular tissue, that should receive treatment because of its unsightly appearance and because it interferes with function. Although it is almost always benign in its behavior, it can effect upon the patient stigmata that are in many respects as severe as those which result from malignant tumor. Indeed, Byars[1] has designated as "malignant hemangiomata" those histologically benign, but disfiguring lesions situated about the faces of children, particularly girls.

Hemangiomas are localized hyperplasias of the vascular tissues of the dermis or of the subcutaneous tissue. They may be bright red in color or they may be purple. They vary considerably in size, ranging from telangiectasias 1 mm. in diameter to areas as large as half of the body surface. They may be flat or they may be raised above the general level of the skin.

The following types of hemangiomas are recognized (Fig. 1):

1. **Hemangioma simplex**, which includes telangiectasis and nevus flammeus or "port-wine stain." These lesions are characterized by a discoloration of the skin and they are flat, their margins flush with the surrounding skin. Histologically, the vascular elements, principally capillaries, are situated just beneath the epidermis. The endothelial channels are lined with a flat, adult-type endothelium and for the most part these lesions are resistant to radiation therapy, and they are usually too large to excise. The lighter-colored lesions seen about the face and neck in the very young are helped somewhat by x-ray[2] and radium, but the deeply-colored lesions are helped only slightly, if at all.

2. **Nevus vasculosus**, or "strawberry mark," is a lesion greatly benefited by irradiation treatment. It is an elevated lesion showing skin discoloration.

3. **Hemangiomata cavernosum and hypertrophicum** are likewise benefited by irradiation. These lesions may be seen in combination with the nevus vasculosus variety. The cavernous and hypertrophic hemangiomas may be composed of dilated vascular channels, principally capillaries, or they may have small arteries, arterioles and venuoles. Others may have larger vascular components, such as veins, and assume the characteristics of varicosities. Still others may show marked cellularity (these are the lesions which possess potentialities for further growth). Grossly, hemangiomas showing any of these histological characteristics may be indistinguishable, and we are unable to predict which lesions possess the potentialities of continued growth, another reason for advocating early treatment.

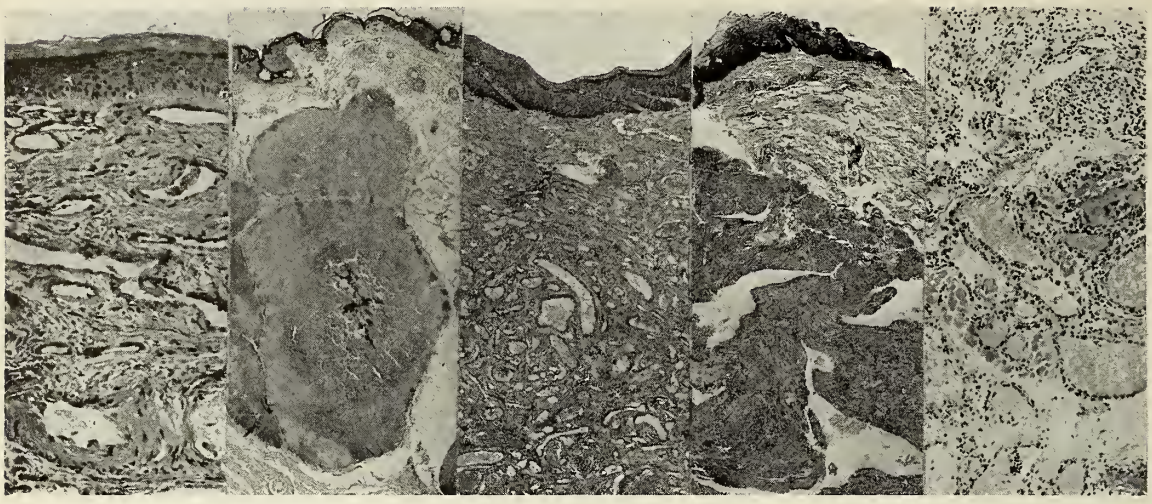
Some workers believe that hemangiomas will regress spontaneously and that treatment is not necessary. For example, such implications are

* Presented before the Section on General Practice of the Indiana State Medical Association at the annual session at French Lick, October 29, 1947.

[1] Byars, L. T.: "Malignant" Hemangiomata, Surgery, Gynecology, and Obstetrics, 77: 193-198, Aug. 1943.

[2] Pendergrass, E. P., Katterjohn, J. C., and Butchart, J. B.: Some Considerations in the Treatment of Hemangioma in Infants and Young Children, American Journal of Roentgenology, 60: (in press), 1948.

Figure 1.



Various types of hemangiomata are illustrated. From left to right: (1) Histologic section of **capillary hemangioma** or "port-wine stain." Note the adult type endothelium lining the vascular channels. These lesions are usually extremely irradiation-resistant. (2) **Cavernous hemangioma** with dilated thin-walled capillary channels which is an extremely irradiation-sensitive lesion. (3) **Cavernous and hypertrophic** hemangioma containing arterioles, venuoles and small veins in addition to capillaries. This type is irradiation-sensitive. (4) **Cavernous hemangioma** containing large thick-walled veins, an irradiation-resistant type which resembles varicosities. (5) **Very cellular hypertrophic and cavernous hemangioma,** a lesion thought to be capable of extensive growth. Clinically, the latter four types may be indistinguishable.

found in the writings of Lister,[3] Nancel-Penard,[4] and Winer.[5] Contrary to this view, many believe that most hemangiomas will not regress spontaneously. In a recent report by Pendergrass, Katterjohn and Butchart,[2] only four hemangiomas in a series of 560 (Fig. 2) showed tendencies toward spontaneous regression. It is true that some of the nevus vasculosus variety may spontaneously regress, but early treatment of hemangiomas is recommended because:

1. It is not possible clinically to distinguish with accuracy which hemangiomas might regress and which might continue to grow. Treatment can be administered more easily and safely to smaller lesions before growth has taken place.

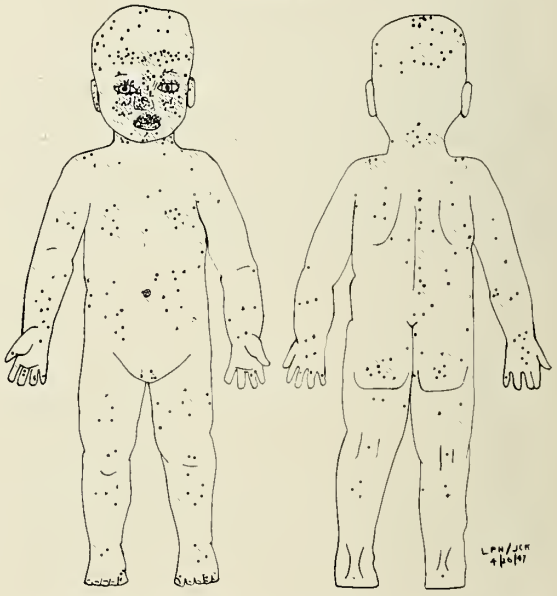
2. In the proper hands treatment by irradiation can be administered absolutely without harmful effects.

3. Treatment by irradiation will enhance any natural tendency for spontaneous regression.

4. A physician has no right to deny treatment to any patient on the *hope* that a lesion might disappear.

Confusion has arisen regarding the treatment of hemangiomas by roentgen or radium irradiation as a result of scattered reports in medical and lay literature. There are some workers who do not utilize the method of irradiation. They feel that delayed untoward effects may be produced in the skin, that bone growth may be altered, and that disfiguring effects may be produced. Such disapproval of the method is not justifiable, because such changes cannot be produced, if treatment is given judiciously and the amount of treatment is kept

Figure 2.



The distribution of 560 hemangiomas in 406 patients treated in the Department of Radiology at the University of Pennsylvania Hospital since 1938 is illustrated. A large number of hemangiomas occur around the head and neck.

[3] Lister, W. A.: The Natural History of Strawberry Naevi, The Lancet, 1: 1429-1434, 1938.

[4] Nancel-Penard: Treatment of Vascular Nevi, J. Med., de Bordeaux, 107: 471, 1930.

[5] Winer, L. H.: Hemangiomas: Classifications and Treatment, Journal-Lancet, 61: 168-172, 1941.

small. In the old days, cancerocidal doses of irradiation were given to hemangiomata, and late deformities and atrophy were produced. With the recent methods of treatment, such as those which are advocated in this paper, dosage is kept low and undesirable changes will not be produced. Cancer-lethal doses should not be given to histologically benign tumors such as hemangiomas. There was very little scarring and no bony atrophy in any of the patients treated by irradiation and reported by Pendergrass, Katterjohn and Butchart.[2]

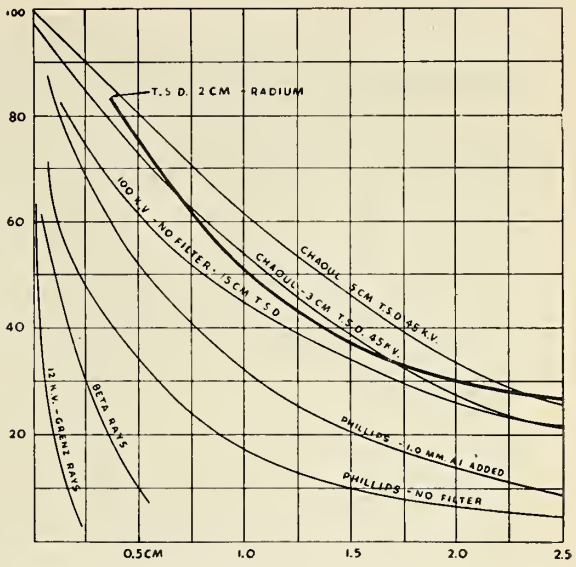
There is one item in the management of hemangiomas on which everyone is agreed. No matter what form of treatment is administered, it should be administered early, ideally during the first few weeks of life. At this time the endothelial lining of the vessels is most susceptible to irradiation treatment and the lesion is as small as it will ever be. In older patients more treatment usually is required and scarring is more apt to occur.

Among the forms of treatment which have been advocated are:

1. Radium therapy.
2. Roentgen therapy.
3. Grenz rays, a form of superficial x-ray.
4. Topical use of radioactive substances.
5. Carbon dioxide snow.
6. Injection of sclerosing solutions.
7. Tattooing.
8. Cosmetic disguise.
9. Surgical excision or ligation.
10. Electrocoagulation.

The best results in the treatment of hemangiomata are obtained by proper roentgen or radium irradiation. The agent selected will depend upon the size and the type of lesion, the anatomical site of the lesion, and the facilities available for treatment. In general, superficial elements are treated first. They may be treated with contact x-ray therapy,[6, 2, 7, 8, 9] unfiltered and of low kilovoltage (50-85 kv.) (Fig. 3), or with radium and radon plaques or molds.[10, 11] If the lesion is thick and deep and roentgen therapy is selected, it is desirable to treat with a somewhat higher kilovoltage (never in excess of 135 kv.) and to introduce a thin filter (1-3 mm. of aluminum). If radium is used,[10, 11] at least 0.5 mm. of platinum filter should be incorporated and the radium is usually placed 2-4 cm. from the lesion.[10] Due consideration must be given to underlying growing bone, and if the lesion is situated over an epiphysis, treatment must be modified so that less than 500 roentgens are delivered to the underlying bone.[12] If the lesion is situated over growing bone, roentgenograms are always made before and after treatment. Three hundred roentgens are given to the hemangioma or an equivalent number of gamma roentgens if radium is used and the patient is seen in six weeks or two months. By this time most of the radiation effect will have been exerted and the lesion may be treated again. If the lesion is still regressing from treatment at the time of the second office visit, further treatment is postponed. Usually two to seven such visits are required in treating one of these lesions. Upon occasion one treatment will do the job. The lesion is tested for blanching with light diascopic pressure. In general, if the lesion blanches the prognosis regarding complete cure is definitely better than it is if little or no blanching occurs.

Figure 3.



This graph illustrates the amount of treatment received at different depths below the surface of the skin when various forms of irradiation are used in treating hemangiomas. The amount of treatment is expressed as percentage of dose received on the skin, *, 6, **, 7, 8, 9, ***.

[6] Chaoul, H.: Low-Voltage Short-Distance X-ray therapy, in "Treatment of Cancer and Allied Diseases by 147 International Authors," edited by G. T. Pack and E. H. Livingston, Paul B. Hoeber, Inc., New York, 1940, vol. 1, p. 234.

[7] Pendergrass, E. P.: Roentgen Therapy by the Method of Chaoul, American Journal of Roentgenology, 35: 1, January, 1936.

[8] Pendergrass, E. P., Hodes, P. J., and Garrahan, C. J.: Roentgen Therapy by the Method of Chaoul, Radiology, 32: 142-154, 1939.

[9] Pendergrass, E. P. and Hodes, P. J.: Further Experiences with Chaoul Therapy, Radiology, 37: 550-559, 1941.

[10] Patterson, R. and Tod, M. C.: The Radium Treatment of Angioma in Children, American Journal of Roentgenology, 42: 726-730, November, 1939.

[11] Quimby, E. H.: Grouping of Radium Tubes in Packs or Plaques to Produce the Desired Distribution of Radiation, American Journal of Roentgenology, 27: 18-39, January, 1932.

* Blomfield, G. W. and Spiers, F. W.: Dose Measurement in Beta-Ray Therapy, British Journal of Radiology, 19: 349-356, September, 1946.

** Glasser, O., Quimby, E. H., Taylor, L. S., and Weatherwax, J. L.: Physical Foundations of Radiology, Paul B. Hoeber, Inc., New York, 1944.

*** Quimby, E. H. and Focht, E. F.: Dosage Measurements in Contact Roentgen Therapy, American Journal of Roentgenology, 50: 653-668, 1943.

Figure 4.



Finger-nail polish scale used to match the color of the various hemangiomas before and in the course of treatment. The colors are matched by the parents and the radiologist. Minute changes are readily apparent when this scale is referred to in the course of treatment. This chart is reproduced with the permission of the Northam Warren Corporation, Stanford, Connecticut.

Color changes are recorded by matching the lesion with a color on a finger-nail polish scale (Fig. 4), so that minute changes can be observed and parents will not become too impatient. All lesions are photographed in color. The guiding principle is to give small treatments and allow sufficient time to elapse between visits so that maximum effect from each treatment can be realized.

If the deeper vascular components have not been controlled with the dermal portion of the lesion they are treated by implantation with radon tubes or "seeds" (Fig. 5). When this procedure is done it usually requires hospitalization for a day and a general anesthetic is best used if accurate distribution of the seeds is to be obtained. Low intensity tubes are used and again the dosage aimed at is quite small. More seeds can always be implanted if they are necessary, but radiation damage due to overtreatment cannot easily be corrected. It is important to emphasize that only one-eighth of the dosage required for the treatment of cancer is given to these patients with hemangioma.

Recently grenz rays have been more widely used in the treatment of "port-wine stains," with some favorable results. Grenz rays are x-rays of long wave length with a minimum of penetrating power. Since their penetration is about that of beta rays (emitted from radioactive phosphorus, for example), these agents may be considered together.

All "port-wine stains" should be treated judiciously with grenz rays, the topical application of radioactive materials,[13] the beta radium plaque, or low voltage contact roentgen therapy, if the patient is seen in the first few months of life. If these agents are ineffective or if the patient is seen later in life tattooing is recommended.

The use of carbon dioxide snow topically for superficial colored portions of hemangiomas and the injection of sodium morrhuate for the more deeply situated portions of the lesions have been advocated by some physicians.[14] Hemangiomas

Figure 5.



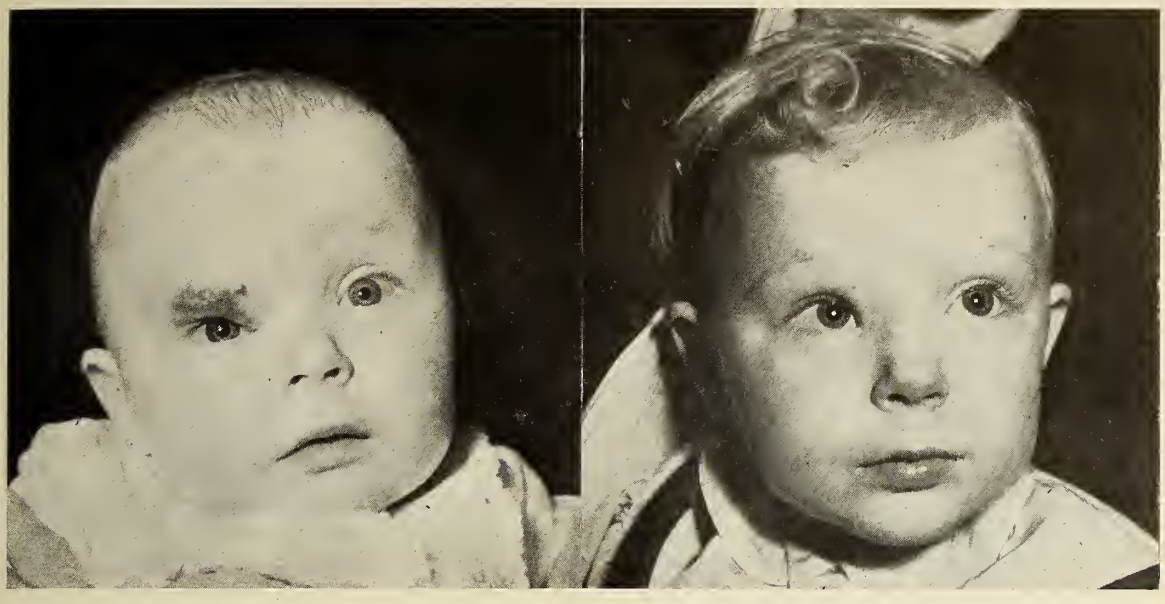
Roentgenograms of the skull of a patient treated only with radon tubes. The lesion was without dermal involvement and was situated in the upper eyelid adjacent to the supra-orbital foramen. The postero-anterior view was obtained immediately following the initial implantation of three "radon seeds." Incomplete regression occurred and three months later two additional "seeds" were implanted, effecting a complete cure. Low intensity tubes of 0.1 to 0.2 millicuries should be used, otherwise serious damage to the eye may result.

[12] Woodard, H. Q. and Coley, B. L.: Correlation of Tissue Dose and Clinical Response in Irradiation of Bone Tumors and of Normal Bone, American Journal of Roentgenology, 57: 464-471, April, 1947.

[13] Low-Beer, B.V.A.: External Therapeutic Use of Radioactive Phosphorous: Erythema Studies, Radiology, 47: 213-222, September, 1946.

[14] Watson, W. L., and McCarthy, W. D.: Blood and Lymph Vessel Tumors, Report of 1056 Cases, Surgery, Gynecology and Obstetrics, 71: 569-588, 1940.

Figure 6.



Photographs of a patient with a lesion similar to that of the patient in Figure 5. This patient received contact x-ray therapy to the dermal portion of the lesion. Residual subdermal involvement necessitated the implantation of weak radon tubes. The second photograph shows the appearance of the child 2½ years later. This patient was treated in the Department of Radiology of the University of Pennsylvania Hospitals.

treated with carbon dioxide snow usually heal with white scars and the results are not as good generally as they are with properly administered irradiation therapy. An added objection to the method is the pain associated with the treatment, particularly is pain associated with injection of sodium morrhuate. Overtreatment by either agent may result in infected sloughing areas which will heal with bad scars.

Tattooing is currently advocated by Conway and Docktor[15] in the treatment of troublesome radiation-resistant "port-wine stains" which are deeply colored. These "Medical Rembrandts" tattoo their patients with various mixtures of yellow ochre, cadmium yellow, verde green and white at a number of different sittings until the desired blending of the bright red of the hemangioma is obtained. The results in some of the cases treated by this method offer promise in the management of a lesion heretofore merely disguised by cosmetics, especially "Covermark."

Surgical treatment is useful in selected cases. Pigmented nevi, often erroneously designated as hemangioma, should be serially excised. They are extremely irradiation-resistant and should not be treated. Lesions containing large vascular components and resembling varices should be treated by ligation and possibly sclerosing agents. Soft tissue tumors, containing, in addition to their angiomatous elements, other elements such as fibrous tissue, et cetera, should be excised. Lesions that prove to be resistant for some reason, after a fair trial by one of the other methods, may require excision. Surgical excision can be performed on cavernous lesions if they are small and can be completely excised and the operative wound closed without tension. Attempted excision in the large bulky lesions is sometimes a hazardous procedure because of the possibility of hemorrhage.

Electrocoagulation should be limited to the treatment of telangiectatic vessels. It should be done by introducing a fine needle into the vessel and applying the coagulating current to the needle. Needless to say, hemangiomas should not be grossly coagulated if scarring is to be prevented.

Summary:

1. All hemangiomas should be treated, and they should be treated in the first few weeks or months of the patient's life.

2. Hemangiomas may be treated effectively with roentgen or radium therapy without injury to the patient.

3. The results of the treatment of hemangiomas with irradiation are superior to the results of treatment by any of the other methods, except in the special instances mentioned.

[15] Conway, H. and Docktor, J. P.: Neutralization of Color in Capillary Hemangiomas of the Face by Intradermal Injection (Tattooing) of Permanent Pigments, Surgery, Gynecology, and Obstetrics, 84: 866-869, 1947.

THE TREATMENT OF INFANTILE PARALYSIS DURING THE ACUTE STAGE*

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CHICAGO

As soon as the diagnosis of infantile paralysis is proved or strongly suspected treatment should be started. In addition to the family doctor or internist, an orthopedic surgeon should be summoned immediately. The success of the immediate orthopedic treatment depends upon meticulous care and unrelenting observation. Time may be the essence of success in treatment.

Rest. Rest is the one great essential in the immediate care. This must be not only complete and absolute, but must be managed so that the muscles placed at rest will be kept in a position of neutral pull. This is the most important factor in the prevention of later deformities and in minimizing residual disabilities. Complete rest is of such great importance during the early days of inflammation of the component parts of the central nervous system that it is usually far better to keep the child in bed at home, when the disease is first suspected, than it is to move him any appreciable distance to a hospital, especially if the trip may be rough. The fatigue and agitation which may result are harmful, especially in "bulbar" cases. The decision should be based on the condition of each patient.

Deformity is largely preventable. In order to achieve this end, muscles must be protected from stretching and fatigue. A muscle placed at rest in a position of relaxation, with its attachments approximated, will recover sooner and more completely than will another muscle placed under tension.

Under no circumstances are massage or electrical stimulation to be used during the early acute stage. Not until the acute period is over should massage and the various forms of specific muscle training be started. (In general, the accepted dividing line between the acute and convalescent stage is the cessation of muscle and skin tenderness.)

Application of External Heat. Extremities should be kept warm. Applied heat will relieve muscle and skin tenderness. Heat will cause muscle pain to disappear more readily, and will shorten the duration of the acute painful period.

In the acute sensitive stage one should employ hot applications. Woolen strips saturated with boiling water are "fished out" with a pole and run through a wringer, twice. These are applied from one joint to another but not over the joint, in order to permit passive and active movements. These dressings are protected with oil silk and more dry, warm wool. They are changed every half hour during the first twenty-four or forty-eight hours. This is continued twenty-four hours a day. After the extremely sensitive period has passed, the procedure is carried out from 8 A.M. to 8 P.M. and then only every two hours. The fomentations gradually cool. Small rolls of towel material are placed under the knees.

Gentle passive exercises are given, but never to the point of pain. The patient's activities are directed and concentrated in the area of the tendon where movement is to be expected. After two passive movements, one active movement is attempted.

The Kenny theory of the situation in acute polio is based upon:

1. Muscle spasm.
2. Incoordination.
3. Mental alienation.

Her procedure in correcting the situation includes:

1. No splints of any kind except a foot board.
2. Hot fomentations.
3. Muscle re-education.
4. Avoidance of fatigue.
5. Maintenance of proper positions.
6. Complete joint motion.

The most important practical benefits derived from this treatment are relief from pain and sensitiveness, and the prevention of contractures.

Primary Splinting. Any recognized type of splint which will maintain neutral positions can be used. In early poliomyelitis it is imperative to individualize the patients and to apply the measures appropriate to each case.

The Purposes of Splinting Are:

1. To balance muscles and thereby retain neutrality of muscle pull.
2. To protect weakened muscles.
3. To support limbs or other parts of the body.

Positions Favoring Optimum Return of Muscle Power. There are certain definite positions that are most desirable for the future usefulness of the limbs and trunk, a few of which are given here.

Fingers and Thumbs. The proper position is that assumed in holding a drinking glass.

Wrist. The wrist should be placed in slight extension (dorsiflexion).

Forearm. The position of supination and pronation of the forearm are varied in accordance with the muscle weakness. The neutral position which protects both pronators and supinators is midway between pronation and supination.

* Presented before the General Scientific Session of the Indiana State Medical Association, at the annual session at French Lick, October 30, 1947.

† Professor of Bone and Joint Surgery, Northwestern University Medical School, Chicago.

Elbow. The elbow should be flexed to a right angle. If the triceps is weak, it should be favored by keeping the elbow extended beyond a right angle. (This muscle is important in the later use of crutches.)

Moving and Turning the Patient. During the first few weeks it is advisable to move the patient as little as possible. It is important, however, to prevent bedsores.

If the patient is on a straight Bradford frame, he may be turned on his face, with his feet hanging over the edge of the frame, provided the frame is elevated on blocks of wood which are high enough to prevent pressure of the toes on the bed.

The relation of the bed and bedside-table should be changed so that the patient will not repeatedly bend his trunk to the same side. Constant turning toward the same side may contribute to torticollis or scoliosis (if there is weakness of neck, abdominal or back muscles). Repeated reaching to the same side to turn the dial of a radio may cause imbalance of the trunk muscles.

The child on a frame may be carried to any room in the house. He may rest on top of the kitchen table, on a bench in front of the window or on the porch. He may even be taken out of doors on top of a coaster wagon. The head of the frame may be tilted at an angle, allowing the child to look about more easily, provided it is always in a safe position. An opening in the canvas, in the region of the buttocks, makes it possible for the patient to use the bedpan without disturbing his position.

Turning the Patient. In turning the poliomyelitic patient, twisting or torsion must be avoided. He should be handled as though he were a rigid object, like a poker which cannot be bent. The pelvic and shoulder girdles must turn as one unit. The nurses or attendants must not "wring" the patient as though he were a towel. A little traction and turning at the same time is often gratifying to the patient. The Stryker turning frame is very useful. The patient should be turned occasionally to prevent the formation of kidney stones.

Nursing Care. The patient must be kept in bed, with physical and mental quiet. To preserve rigidity and prevent sagging, several boards or a wood frame may be placed under one or two mattresses. An "illuminated" cradle should be used to keep the coverings off the feet and the limbs warm. The room should not be brightly lighted. The patient should be handled with extreme gentleness, since the limbs are often excessively tender and sensitive to movement. A many-handled canvas litter may be placed under the mattress to assist in transportation. Ice bags applied to the back of the neck and to the spine for short periods sometimes relieve restlessness and pain. Sponging of the body should be done gently. The diet should be bland. The bowels must be kept open, but not with cathartics. Catheterization may be necessary.

Care of the Patient Immediately After the Febrile Stage. After first aid measures such as splinting and heat have been applied, and other supportive measures and specific treatment have been instituted, the temperature will usually revert to normal, i.e., within a week or ten days. At this time other measures may be instituted, to alleviate residual muscle tenderness, and one may continue with the further treatment.

Treatment by Warm Sea Salt Baths. Warm sea baths alleviate muscle and nerve pain. In some instances they may be started very cautiously within seven days after the onset of the disease.

Completion of Physical Examination. It is often necessary for the physician to wait until most of the muscle tenderness has subsided before he can complete the physical examination and determine the extent of the muscle involvement. Thus a more accurate picture of the future outcome may be obtained. Because rest is so imperative in the very early stages, it is much better to postpone a complete muscle examination until soreness has largely disappeared. Irreparable harm may be done by the energetic use of active physical measures too early, in an attempt to prevent paralysis. The prevention of further paralysis lies mainly in the early maintenance of neutral muscle positions. Only after a complete picture of the seriousness of the muscle involvement is obtained can one decide what further therapeutic measures should be employed.

Physical Therapy After the Acute Stage. Attention should be directed to the prevention of deformities by means of rest in proper positions, with constant supervision of the most minute details.

The less patients are handled in the early stages, the better the results will be.

The majority of patients are kept off their feet from ten to twelve months before they are allowed to attempt to stand or walk even with the support of braces and crutches. If, however, a patient is very slightly affected, his activities will depend largely on the return of power to the muscles of his trunk, pelvis and lower extremities. He would probably be kept off his feet for at least six months.

Muscle Training. Following an accurate muscle diagnosis, and as soon as soreness of the limbs has disappeared, active muscle training is begun, with exercises for five or ten minutes once a day. The aim is to prevent atrophy of the muscles due to disuse and to aid in restoring the function of these muscles by training unaffected nerves to carry on the work of the affected ones, so far as possible.

Overuse of an affected limb is harmful. Early sitting and standing, and constant efforts to move the muscles, urged by some cultists and unrecognized practitioners of physical therapy, are dangerous. There are no magical short cuts to recovery.

Assisted Movements. Muscle training consists in aiding the patient to perform a certain movement, in the hope of stimulating an impulse for the movement from the brain to the weakened or para-

lyzed muscle. The patient is told to send a voluntary impulse to contract a muscle, and the limb is placed in such a position that gravity will impel performance, or else the movement is assisted by hand. "A movement a day keeps adhesions away." In the first year following paralysis involving one or both legs, the best results follow non-weight-bearing exercises combined with little, if any walking. In selected cases, however, the upright position with protected weight-bearing and restricted walking have certain advantages over protracted inactivity.

Underwater treatment has been an important advance in handling poliomyelitis patients. Lowman allows the patient to begin underwater movements as early as the twenty-first day, and to walk in deep water at the end of four or five weeks. The patient is submerged up to his neck. This improves his morale by eliminating pain, fear and anxiety, and by giving him pleasure. It restores balance and instills courage. The general health, sleep and appetite improve. Nervousness diminishes. The buoyancy of the water minimizes fatigue of the weakened muscles. Ability to swim is a most valuable asset. Swimming should be a part of the school drill. It is a sport in which the crippled child can equal others. Unsupervised swimming may cause much harm.

Light massage, if given by a person especially trained in the after-care of infantile paralysis, is valuable. Good massage never tires a patient. Massage improves the circulation and the tone of muscles.

Braces. A brace is a mechanical support whose purpose is to maintain a certain position of a portion of the body. A splint, strictly speaking, is a type of brace. Splints are used early in the acute phase of the disease to maintain neutral muscle position, to prevent later deformity and to diminish pain.

Braces, on the other hand, are used during the chronic or residual phase to supplement a deficiency in function caused by weakness or paralysis of muscles, and to prevent further deformity by furnishing adequate support and protection. Braces may also be used to correct deformity in selected cases.

Braces perform their greatest service either during the interval between the stage of maximum paralysis and such time as corrective operation can be performed, or after manipulation or orthopedic surgery has accomplished its final degree of correction.

The minimal requirements of an efficient brace are: (1) to furnish the highest degree of stability commensurate with the physical state of the patient; (2) to protect against imbalance caused by unequal pull of normal muscles against paralytic muscles; (3) to prevent further deformity caused by this imbalance; (4) to be of light enough construction to permit the patient to use it without undue fatigue; (5) to avoid pressure areas on the skin or bony prominences; and (6) to be within the financial reach of the patient or of an agency that will furnish it, without sacrificing durability.

Indications for Surgical Treatment. The purposes of operation are: to improve muscle function, improve static stability, correct deformities, and make it possible for the patient to discard braces. In general, operations on poliomyelitis patients include osteotomies, arthrodesis, fusions, resections of bone, plastic operations and tendon plastics and transplantations.

One should try to avoid major operations before the age of ten or twelve years. As a rule, no extensive operations should be performed within a year after the acute attack.

Operations on soft tissues include tendon release, tendon lengthening, tendon transplantation, tenodesis, muscle release and transplantation, silk ligament suspension and fascial release and transplantation.

Operations on bones include osteotomy, tendon fixation, arthrodesis arrest of epiphyseal growth, bone lengthening and bone shortening.

Remarks

The six most important considerations concerning poliomyelitis are: first, a reliable test for the early diagnosis, i.e., before paralysis occurs; second, the isolation, identification and complete information concerning the virus; third, a protective vaccine; fourth, serum or other substances that can be given before paralysis has occurred; fifth, maintenance of joints in positions of neutral muscle pull; sixth, the application of external heat.

One may reasonably hope that by improved knowledge the diagnosis will be made in the preparalytic stage, and in future epidemics lives will be saved, deformities will be prevented and disability will be minimized.

ANESTHESIA FOR CHEST SURGERY†

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INDIANAPOLIS

ANESTHESIA for chest surgery presents two special anesthetic problems, control of the airway for lung inflation by positive pressure and provision for keeping the lungs clear of secretions and blood. Both of these problems are met by the use of the endotracheal tube. With the tube in place absolute control of the airway is established and the lungs may be easily inflated by increasing the pressure on the breathing bag. The bronchial tree may be easily kept clear by passing a catheter through the endotracheal tube at frequent intervals to remove secretions. The aspiration of the lung becomes increasingly important in so-called wet lung cases, or cases in which bleeding is encountered. Especially when the patient is placed in the lateral position for operation is aspiration necessary to keep fluid from gravitating to the good lung. If these secretions are not removed the patient literally drowns in his own body fluid.

The advantages of endotracheal anesthesia for chest surgery are unquestioned,[1,2,3] but the methods and route of intubation are not universally agreed upon. Nasotracheal intubation with the Magill tube is advocated by some[4,5,6] and orotracheal intubation by direct laryngoscopy, using Magill or Flagg type tubes, by others.[7] Orotracheal intubation by direct laryngoscopy was recommended to us as being less traumatizing to the tissues of the nose, pharynx, and larynx. The Woodbridge tube was recommended because of the ease with which a catheter could be passed for aspiration of the bronchial tree and because lateral compression was not possible, preventing accidental kinking of the tube and occlusion of the airway.

This report covers the 18 month period from December 1945 to May 1947 and includes twenty-seven successive intrathoracic operations. There were 15 lobectomies, bronchiectasis being the diagnosis in 10; 3 pneumonectomies; 2 diaphragmatic hernias; 3 operations for carcinoma of the esophagus; 1 gastric resection; 1 decortication of the lung; 1 transthoracic vagotomy; and 1 exploratory thoracotomy with drainage of a lung abscess.

The oldest patient was 72 in whom a nonresectable carcinoma of the esophagus was found. The youngest, aged 3 weeks, was successfuly operated upon for a diaphragmatic hernia, using a thoracic approach. This little patient was intubated after induction with open drop ether with a number 18 catheter without a cuff, and the anesthesia maintained with ether-oxygen in a closed system. All patients in this series were intubated by the direct vision method, using a Woodbridge tube with an inflatable cuff, with the exception of the case just mentioned. The cuff was not inflated in one case (a lobectomy) in which the surgery was done with procaine infiltration anesthesia, the Woodbridge tube being used for aspiration of the bronchial tree and administration of intermittent positive pressure oxygen by means of a tight fitting mask, in the manner advocated by Wilkins.[8]

Various anesthetic agents were used in this series. Open drop ether induction with ether oxygen maintenance after intubation was used in three cases. Nitrous oxide-ether was used four times. Cyclopropane induction with ether oxygen maintenance was used in two. Cyclopropane-ether was used in 8 cases. Nitrous oxide-cyclopropane induction, cyclopropane-ether maintenance in 2. Local ½ per cent procaine and cyclopropane was used in four cases. In these cases the Woodbridge tube was inserted after application of 2 per cent pontocaine to the upper airway (4 per cent Cocaine in one) and the operation begun with local anesthesia, the cyclopropane anesthesia being started about the time the pleural cavity was opened. Cyclopropane alone was used in one case and one case already mentioned was local procaine infiltration with intermittent positive pressure oxygen.

Pentothal induction was used in two cases with cyclopropane maintenance in one and cyclopropane-ether maintenance in the other.

Topical anesthesia of the pharynx, larynx and upper trachea was employed 13 times, using co-

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caine, pontocaine, or combinations of the two drugs. We found that adequate anesthesia could be obtained, using 2 per cent pontocaine in an ordinary atomizer. After spraying the mouth and pharynx and waiting a few minutes, a laryngoscope is passed and pontocaine sprayed directly into the trachea during inspiration. This produced adequate anesthesia for intubation in all five cases in which this method was used. In four other cases cocaine or cocaine and pontocaine were used to produce anesthesia for intubation before the general anesthetic was started. This method has some advantages, in that the patient can be placed in position on the operating table and the operative site prepared before the general anesthetic is started, thus saving some time when the patient is anesthetized. Other methods of topical anesthesia for the introduction of endotrachael tubes have been described,[5,6,7] but the method described above is simple, effective, and requires no additional equipment other than an ordinary atomizer. Topical anesthesia is an aid in decreasing the tracheobronchial spasm that follows intubation unless the general anesthesia is carried to a deep plane.

The importance of blood replacement in chest surgery is not to be overlooked. All but five of this series received blood while in surgery. It was customary to start intravenous fluids or blood early and let them run slowly, speeding up the flow during periods when the blood loss was great and slowing it down when the blood loss was under control, in an effort to replace the blood as it was lost, rather than trying to make up a deficit at any one time. In most of the cases a cannula was anchored in an ankle vein at the beginning of the operation, and in a few cases it was necessary to give blood by an arm vein also, in order to keep the blood pressure up. It has been our experience that these blood transfusions need almost constant watching, otherwise, just when you need blood most you find that it has stopped running. At times it has seemed to us that an engineer to keep blood and fluids running and to look after the aspirator, lights and other equipment in the operating room is almost a necessity, because in spite of our efforts to replace blood the blood pressure dropped to uncomfortably low levels in five cases (65/?, 75/25, 70/50, 70/45, 40/?). The amount of blood given during surgery ranged from 500 cc. to 2,000 cc., nine patients receiving 1,000 cc.

Two cases had an elevated blood pressure early in the course of surgery despite good ventilation of the lungs and fresh soda lime. We have no explanation as to the cause.

The operating time exceeded three hours in the majority of the cases. The longest time was 5 hours and 45 minutes for a pneumonectomy, and the shortest 50 minutes for a transthoracic vagotomy.

Controlled respiration was used in two cases. In one the pleura was open on both sides of the chest at the same time, and in the other there was a long period of apnea following the induction.

In some cases the lungs were inflated at intervals of twenty to thirty minutes by making slow, steady pressure on the breathing bag. In others, the lungs were inflated only at the end, just before the chest was closed. Before removing the endotracheal tube, and this is properly done after the patient begins to swallow, it is important to aspirate the mouth and pharynx thoroughly and then perform a thorough final aspiration of the tracheobronchial tree. We believe it is helpful if a cough can be induced at this time to help raise any secretions that may be beyond the reach of the aspirating catheter. In a few of these cases bronchoscopic aspiration was performed immediately after the endotracheal tube was removed, but the bronchoscopist did not consider that enough material was obtained to make it a routine procedure in all cases.

There were no complications[9] in this series from the use of an endotracheal tube.

There were three deaths in this series, none of them in the operating room and none of them attributed to the anesthetic. One patient, operated on for primary bronchogenic carcinoma, died on the fourth postoperative day with hyperpyrexia and shock. Another died on the tenth postoperative day due to rupture of the suture line of a gastric resection. The third died on the fifth postoperative day of acute cardiac decompensation. These results compare favorably with other series reported.[1,10,11,12,13]

Mousel,[13] in reporting 559 lobectomies, emphasized the importance of close cooperation of the surgical team and frequent aspiration of the bronchial tree. We wish to re-emphasize these two points.

CONCLUSIONS

1. Satisfactory anesthesia for chest surgery may be attained by a variety of anesthetic agents.

2. Twenty-seven cases are presented with a total mortality of three, or 11 per cent. Anesthesia was not attributed as the cause of death in any case.

3. The importance of close cooperation of the surgical team, repeated frequent aspirations of the bronchial tree, and replacement of blood loss is emphasized.

4. A simple, effective method of topical anesthesia for intubation is presented.

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SURGICAL CONDITIONS OF THE GALLBLADDER*

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THE diagnosis and treatment of gallbladder disease is a problem which is difficult to solve. Surgical conditions of the gallbladder require laparotomy to decide the method of procedure. Even after careful history, x-ray and physical examination, a surgeon must actually see the condition before he is able to determine which type of operation must be done.

X-ray study of these cases is of great value in the diagnosis. The symptoms of chronic cholecystitis, with or without stones, are biliary colic, digestive disturbances, nausea and vomiting, along with subnormal temperature. Jaundice may or may not be present. Surgery is indicated in many cases, imperative in some, and only to be considered in others.

There is a type of gallbladder which is shrunken, and which at operation appears to be small and nonfunctioning. I have seen cases of gallbladder disease in which the gallbladder is very small, possibly the size of the little finger or smaller. If these gallbladders are drained by cholecystotomy the patient usually improves. A few years later the patient may get a return of the symptoms, with severe pain, which requires morphine to relieve. At the second operation the gallbladder has changed into a larger one, containing more bile, possibly stones and some adhesions. This gallbladder may be much safer to remove at this time with good results.

The conditions which require cholecystectomy and those which require cholecystotomy are to be decided after the abdomen is open; as Dr. John Deaver used to say, "The illumination of the scalpel."

All gallbladders cannot be successfully removed. If a patient can survive with a cholecystotomy, and is not likely to live with a cholecystectomy, then of course it is the operation to be performed. The following conditions make cholecystotomy the operation of choice:

(1) The location of the gallbladder is such that it is very inaccessible and very difficult to remove. Such a gallbladder, being far up under the liver and possibly in a very fat patient, makes the condition such that surgical drainage of the gallbladder is by far the best treatment.

(2) A stone in the common duct is treated better by not removing the gallbladder, at least until we are sure that we do not need it for good drainage.

(3) The general condition is such that cholecystectomy is hazardous.

(4) When the gallbladder may have to be anastamosed to the stomach.

(5) In some acute conditions of the gallbladder and liver.

(6) Pressure of some obstructive lesions of the common duct where drainage of bile is essential.

(7) Cases of acute hemorrhagic pancreatitis associated with gallstones.

Following are conditions in which cholecystectomy is to be performed:

(1) Chronic or subacute cholecystitis, with or without stones.

(2) Chronic empyema, or distended gallbladder, with stoppage of the cystic duct.

(3) Pancreatitis with associated gallbladder disease, if only slight jaundice is present.

(4) Gangrene of the gallbladder.

(5) Calcareous degeneration of the gallbladder.

(6) Cholesterosis of the gallbladder.

(7) Malignant tumor confined to the gallbladder.

(8) Benign tumor of the gallbladder.

(9) Clinical cholecystitis.

(10) Injuries to the gallbladder.

(11) Typhoid carriers.

The gallbladder should not be removed in the beginning of the operation. The condition of the liver and bile passages should be determined first. Any obstruction, such as neoplasm, congenital or acquired stenosis, which makes the condition irreparable if the gallbladder is removed, should be carefully noted.

A patient may never have experienced an obstruction to the common duct up to the time of operation, yet it is necessary to make sure that there is no obstruction to the duct or stones in it. External inspection will in many cases be sufficient, however this method is not conclusive.

The best means of determining the condition of the common duct is by choledochostomy. In every gallstone patient there is a question of a stone or stones obstructing the common duct. Their absence can only be proven by opening the common duct and examining it from the inside. Stones in the common duct are accountable for many mistakes and so-called recurrences. If I find a stone by exploring the common duct, I usually remove it by cutting over it and parallel to the duct. Here

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a probe is used to make sure that the common duct is open. Then, after washing with normal saline, a rubber T tube is placed in the common duct. This tube is allowed to stay in place until good healing has been established, the time required being about ten to thirty days.

In carcinoma of the biliary system the chances of a cure are not good, but here a laparotomy will disclose the exact condition. Without the operation the diagnosis cannot definitely be made. If carcinoma produces an obstruction to the common duct, an operation will relieve jaundice and itching.

On account of its clinical interest carcinoma of the gallbladder has been carefully studied. It comprises 6 per cent of all carcinomas, affecting women in a ratio of four or five to one man. It usually occurs after forty years of age. It is remarkable that gallstones are present in 70 per cent of all carcinomas of the gallbladder. The structure of carcinoma of the bile duct presents the same type as in the gallbladder; therefore we conclude that a gallbladder with a stone or stones is more likely to become malignant than it would without stones. The results of surgical treatment of carcinoma of the gallbladder are very unsatisfactory.

Most all cases of sarcoma of the gallbladder appear to be in adults who have suffered long from gallstones and usually from suppurative cholecystitis; therefore sarcoma of that organ is believed to arise from an inflammatory basis.

Another treatment of chronic cholecystitis is that of applying phenol after removing the lining of the gallbladder. Another form of treatment is that of electrocoagulation of the gallbladder, leaving the posterior wall of the gallbladder in place, having removed the contents and the rest of it, then applying electrocoagulation to the remaining part.

In reporting a series of 200 operations upon the gallbladder, with a mortality of 6 per cent, I found that I did cholecystectomy on 67 per cent and cholecystotomy on 33 per cent. Most all cases were operated under a general anesthetic. Ether was used in 120 cases and ethylene in 80 cases.

Conclusions

(1) An operation on the gallbladder can be held responsible for the improvement of the patient, if that improvement persists for a reasonable length of time.

(2) Cholecystectomy is the operation to be performed instead of cholecystotomy, wherever possible.

(3) Cholecystotomy may have to be resorted to, with the idea that it is a lifesaving procedure and that the gallbladder may have to be removed later.

(4) Be careful in deciding which type of operation to do after the abdomen has been opened.

TONSILLECTOMY — PRO AND CON

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TONSILLECTOMY is still a debatable subject among internists and pediatricians. The internist has called attention to the frequency with which chronic, latent foci of infection is responsible for the persistence of systemic infections resulting in chronic arthritis, neuritis, cardiovascular degenerations and nephritis. It has been pointed out that chronic infected tonsils increase the possibility of hypertrophy of the thyroid and contribute to the incidence of infected gallbladder or appendix, and increase the incidence of gastric and duodenal ulcers.

When there is a history of frequent attacks of tonsillitis, peritonsillar abscess, or frequent attacks of sore throat, examination will disclose tonsils that are congested, which may be either enlarged or atrophied, and with a great deal of scar tissue. In either case desquamated epithelium and pus may be expressed from the crypts or deeper lacunae by a blunt instrument. The submerged type of tonsil should be examined carefully because the crypts that contain pus may be small and partially covered by scar tissue produced by repeated attacks of infection. These pockets of pus may not be discovered until operated upon.

Tonsillectomy and adenoidectomy are indicated in young children in whom the hypertrophy causes obstruction, with labored breathing, often of a mouth breathing character. Tonsillectomy, after one or more attacks of peritonsillar abscess or quinsy, will prevent the recurrence of said pathology. Tonsillitis followed by systemic infections, such as acute rheumatic fever, endocarditis, or nephritis, should be treated by tonsillectomy as soon as the acute attack of the complicating infection subsides.

Routine removal of tonsils and adenoids in children is to be condemned because of subjecting the child to the risks of surgery without benefit of improved health as a consequence. Moreover, the probable protective function of Waldeyer's ring against infections entering through the nose and

mouth may be impaired by the removal of normal tonsils and adenoids. Waldeyer's ring consists of the faucial tonsils, the adenoids, or pharyngeal tonsil, the lingual tonsil, the lateral pharyngeal bands and solitary lymphoid nodes, scattered over the posterior pharyngeal wall. Its function is to localize infections that enter the body through the oral and nasal orifices, and to aid in the acquisition of immunity to organisms entering the mouth and nose. Hypertrophy of this lymphoid tissue occurs normally in childhood, during the period when immunity is being established against many organisms and infectious diseases.

Figure I



This photograph demonstrates the method I devised seven years ago and have been using since, in order to prevent immediate complications postoperatively. By using the foot of a hospital bed for postural drainage, blood and saliva are not aspirated, thereby preventing postoperative pneumonia and lung abscess.

In many cases, when normal tonsils and adenoids have been removed, the child's general condition becomes worse instead of better. This occurs because the common cold that is acquired in childhood, instead of becoming an ordinary upper respiratory infection, immediately results in an acute bronchitis, or broncho- or lobar pneumonia. This is due to the absence of, or break in the protective ring of lymphoid tissue in the pharynx and throat.

The immediate postoperative complications are bleeding, pneumonia, acute otitis media, suppurative cervical adenitis, atelectasis, tetany, erysipelas and lung abscess.

Indications for Tonsillectomy

1. Hyperplasia of the tonsils, causing difficulty in swallowing, articulation or breathing.
2. Frequent attacks of tonsillitis or quinsy.
3. Chronic laryngitis or bronchitis.
4. Chronic catarrh, or suppurative otitis media, or a eustachian tube infection.
5. Chronic diphtheria carriers.
6. New growths of tonsils.
7. Chronic cervical adenitis or tuberculous cervical adenitis.
8. For general systemic disorders secondary to a focus of infection in the tonsils.
9. Infectious arthritis in which the periarticular changes predominate.
10. Early stages of glomerulonephritis.
11. As a prophylactic measure in certain heart lesions which are made worse by attacks of tonsillitis.

Contraindications for Tonsillectomy

1. Tonsillectomy is of no benefit in the chronic, deforming types of arthritis.
2. It should not be performed during the acute phase of chorea, acute rheumatic fever, or endocarditis.
3. It should not be performed in cases of pulmonary tuberculosis, status lymphaticus, diabetes, hemophilia, purpura, leukemia.

Neoplasms of the tonsils are not common; benign neoplasms include papilloma, fibroma, lipoma, angioma, and fibra-enchondroma.

Malignant neoplasms usually occur after fifty years of age and may be either carcinoma or sarcoma.

Tonsillectomy is only indicated in benign neoplasms of the tonsils and is contraindicated in malignant neoplasms.

Chronic infection of the orifices of the eustacian tubes can generally be picked up with the audiometer in a routine examination of all school children. Especial attention should be given to tones above 8,000 double vibrations. By testing for the lower tones and speech alone, the conditions will not be recognized until the lesion is well advanced. The important thing is to find by examination if there is proper functioning of the eustachian tubes. If there is hypertrophy or infection of the adenoids, surgical adenoidectomy is indicated. If adenoidectomy has already been performed and there has been a recurrence of the growth of adenoid tissue (with infection) about the orifices of the eustachian tubes, the best treatment then is irradiation of this lymphoid tissue.

After repeated attacks of tonsillitis, endocarditis is sometimes improved by tonsillectomy, although malignant endocarditis sometimes occurs in adults after tonsillectomy has been performed during childhood.

Tonsillectomy is recommended in certain cases of arthritis. However, as in endocarditis, taking the history of the patient reveals that some cases

of arthritis have had tonsillectomy and adenoidectomy during childhood.

Pemberton[1] found in 545 cases of arthritis that 31 per cent of the cases had infections of the nose, throat, and accessory sinuses. The fact that the tonsils may be inconspicuous seems to bear no relation to the degree of infection present within them, and upon enucleation they may be found to be necrotic.

There will always be great difficulty in evaluating the results of tonsillectomy, because the child may have repeated attacks of upper respiratory infection, with all the complications, after tonsillectomy. Also, when a child has apparently benefited by tonsillectomy, one cannot be sure that the improvement was due to the operation. This is especially true after the sixth and seventh years, because at this age natural immunity is developed against upper respiratory diseases. Therefore, the growth and development of the child, along with immunity developed while in school, modifies the significance of the result of tonsillectomy.

The operation does not prevent sore throats due to infections, systemic disturbances, and chorea. The child is probably less susceptible to scarlet fever and diphtheria; in some cases acute head colds and otitis media are lessened in incidence; cervical adenitis is materially reduced; however, respiratory infections, such as bronchitis, laryngitis and pneumonia, occur more frequently because of the break in Waldeyer's protective ring of lymphoid tissue. Even if tonsillectomy is performed before the onset of heart infections, it will not prevent cardiac disease. Tonsillectomy performed during existing endocarditis will not prevent the progress of the disease. Recurrent attacks of polyarthritis are not prevented by tonsillectomy.

Edward H. Campbell,[2] of Philadelphia, examined 621 persons (in a university), who had had tonsillectomies, and found that only 22.7 percent of the cases were free of tonsillar tissue. These cases had been operated by general practitioners, pediatricians, general surgeons, and specialists in otolaryngology. He attributes the high incidence of recurrence of tonsillar tissue to the following factors: (1) improper administration of the anesthetic; (2) inadequate illumination of the operative field; (3) unskilled assistance at the operation; (4) imperfect inspection of the fossae. In addition to the inefficiently performed operation, other factors are concerned in the recurrence of tonsillar tissue: (1) the possibility of regrowth of the lymphoid tissue even though the tonsil has been completely removed; (2) proliferation of a lymph node in the fascia covering the tonsillar fossa; (3) hypertrophy of the lymphoid tissue in one of the plicae which may have been intentionally left; (4) extension of the lingual tonsil into the lower pole of the fossa.

This high incidence of 77.3 percent of recurrent tonsillar tissue will have to be considered as a great factor in evaluating the results for and against tonsillectomy. Theoretically, the results of tonsillectomy should only be considered in the 22.7 percent of the group of cases in which a thorough tonsillectomy was performed. However, statistics always include the whole group of tonsillectomies, perfect and imperfect.

The English report shows mass tonsillectomies similar to those in America. The towns of A and B, adjoining each other geographically, provide a good illustration. In A, during nine years 4,055 school children had tonsillectomy and adenoidectomy.[3] During the same period there were only 290 operated in the town of B. There was no evidence of difference or underdevelopment of the population of town B. Routine tonsillectomy as a prophylactic measure should be frowned upon because the operation is not free from fatalities. At least 85 deaths per year take place in England[4] in patients under 15 years of age from tonsillectomy. This does not represent the total mortality because tonsillectomy deaths are frequently concealed under the classification of the complication from which the patient died, such as lung abscess, pneumonia, or mastoiditis.

The relation of poliomyelitis and tonsillectomy during the months of July to October, inclusive, shows that the possibility is minimal, but when it does occur it is generally of the serious bulbar type. The ratio of incidence is one case in 2,000 tonsillectomies.[5] Therefore, the Board of Preventive Medicine recommends that physicians cooperate for the safety of their patients by not operating during a polio epidemic, during these months.

Before tonsillectomy is performed, a full history and thorough physical examination should be performed. Also, urine examination, Mantoux test and Schick test should be performed. If there are allergic conditions present, differentiation should be made between allergy and infection. Dental caries, neglected mouth hygiene, and infected gums are sometimes the cause of adenopathy, instead of tonsils and adenoids. Mouth breathing is generally due to malocclusion by enlarged adenoids. Children with positive tuberculin tests should have an x-ray of the chest before tonsillectomy. Mentally retarded children are not helped by tonsillectomy.

In England approximately 200,000 tonsillectomies

1. Pemberton, Ralph: Arthritis and Rheumatoid Conditions, Their Nature and Treatment. Lea and Febiger, 1929, p. 172.

2. Campbell, Edward H.: Tonsillectomy: Local results and influence of the operation in surrounding tissues. Arch. of Oto., vol. 30, p. 863, Dec. 1939.

3. Deuzer & Felshim, Pretonsillectomy Clinic. J. of Ped., Feb. 1943, p. 239.

4. Great Britain Privy Council, Med. Research Council Report, No. 227; p, 120, 1938 to 1939.

5. Howard, Robert: Relationship of Poliomyelitis and Tonsillectomies. Annals of Otology, Rhinology & Laryngology, vol. 53, p. 15.

per year are done. In America, since 1924 one-third of all operations performed were for the removal of tonsils and adenoids. There is hardly any other procedure where indications are so vague and the general attitude is so uncritical. Most authorities agree that one cannot tell by examination whether a tonsil is infected or not. Thus, one author claims that dilated crypts and caseous masses are evidence of infection, whereas another insists that abscessed crypts beyond the age of infancy are practically a universal condition. Even when the tonsils are removed and examined pathologically, there is no correlation between the infected tonsils and the preoperative symptoms.

The history of repeated attacks of acute tonsillitis is a more reliable indication of chronic infection of the tonsil than the appearance of the tonsil.

Conclusions

Personal observation of patients who have had tonsillectomy:

1. Thirty percent have been benefited by the operation.
2. Twenty percent have been made worse by the operation.
3. Fifty percent were unchanged by the operation.

TOXICOLOGY OF THE HEAVY METALS*

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THE term "heavy metal intoxication" occasionally appears in the literature. To me it has little meaning. The heavy metals, or for that matter practically all inorganic substances, have what might be termed individualistic toxicities. Even the halogens, which usually act in concert, have sufficient differences from the viewpoint of toxicity to separate them sharply. In the field of organic compounds, on the other hand, one can more or less group them so that we may anticipate rather similar properties of the substances within each group. The alcohols, nitro compounds, chloro compounds, the amines, the nitriles, and the aromatic hydrocarbons, conform more or less to group toxicities, so that to name the group is sufficient to define, although somewhat roughly, the toxic properties of an individual member of that group. Thus the chloro compounds are predominantly narcotic in action and usually affect the liver; the aromatic hydrocarbons are primary anesthetics and blood poisons; the nitriles are true protoplasmic poisons in the sense that they arrest the activity of all forms of animal life. The metals, on the other hand, have distinctive and usually unpredictable toxic qualities.

A surprising amount of information is contained in the older literature with reference to the toxicity of the heavy metals. The smelting of arsenical-bearing ore was regarded as unhealthy in ancient Greece. Vitruvius, the Roman architect, condemned the use of lead pipes for certain purposes; the Romans were well acquainted with certain toxic properties of antimony, as borne out by their occasional use of the pocula emetica—the antimony cup in which wine was allowed to stand. The poisonous properties of the vapor of mercury were discovered by Barthelamy d'Anglais in the thirteenth century. Ramazzini related many forms of illness to the use of toxic substances in the arts. A century ago Tanquerel des Planches, in his classical "*Traité des maladies de plomb, au saturnines*," gave a clear clinical description of lead poisoning which might have been written yesterday, and his colleague, Devergie, even at that time drew attention to traces of lead normally present in the urine. Orfila, the father of modern toxicology, traced the course of many poisons in the body and was the first to show that these poisons were present in other tissues as well as in the stomach or its contents. The amazing amount of research and investigation that has been reported to the present time would appear to indicate that there is very little yet undiscovered with reference to metallic poisoning today. It is quite apparent why the toxicology of the heavy metals must appear to the young student to be an old and outmoded subject.

Toxicologists were previously concerned with acute and chronic poisoning and so far as industrial processes were involved they had ample material for study. Cases of mercurial, arsenical and lead poisoning in all stages frequently came to the attention of the practitioner in industrial areas. A very valuable backlog of information was thus accumulated and the obvious signs and symptoms of various types of industrial poisoning have become well-known. The biochemistry of this type of poisoning, however, is still largely unexplored. We know very little about what goes on between active lead absorption and the onset of clinical symptoms of lead poisoning. About all that we know is that deposition of lead to some extent occurs in the bones and that the individual may show some slight anemia. The whole structure of lead poisoning pivots on the apparently very simple matter of the circulating lead. However, the elucidation of the chemical and physical phenomena

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involved requires much more extensive investigation and involves precision measurements of the highest order.

We have progressed in industrial hygiene to that point where we no longer have the acute mass poisonings nor even the chronic poisonings that we had a generation ago. Acute poisoning of individuals does occur as a result of accident and doubtless always will. However, the present-day worker is protected against industrial disease as never before.

Now, although he is protected against severe disease, the worker may not be protected against incipient poisoning. This is a phase of industrial toxicology which requires still further study. It is a difficult field to explore. The tissue changes which occur do so over a long period of time and are unpredictable. The time lag in manganese poisoning, phosphorus poisoning and radium poisoning is now well known, but until these poisonings were recognized in their later stages as industrial diseases and the damage was done, no hint was conveyed of possible danger ahead. Many lesser changes may occur in workers exposed to other industrial poisons concerning which we are still ignorant. There are doubtless numerous instances in which continued exposure to minute quantities of poison is not sufficient to produce specific effects and yet may bring about a general deterioration and diminished power of resistance, as indicated by the prevalence of incidental diseases—such as the reputed prevalence of tuberculosis among mercury workers. It is probably true that many mild symptoms, such as headache, slight nausea, sleeplessness, chills, sluggishness or the so-called loss of vitality, may be traceable to incipient poisoning and these may affect the well-being of workers without being sufficiently severe to call for medical attention. Over a period of years sufficient tissue damage may occur to have some permanent effect on the life of the worker and yet he may go undetected as an industrial casualty.

LEAD

Since it is necessary to restrict our discussion somewhat, I have selected some half dozen metals which are of current interest in industry. I had thought to omit any mention of lead originally but I would like to refer to two or three points in relation to this subject. It is well recognized that the metabolism of lead somewhat resembles that of calcium—to the extent, at least, that it tends to be deposited in bone tissue where it is held rather tenaciously. I would like to draw attention to the fact, however, that lead, contrary to the common assumption, does not go on accumulating in the bones indefinitely. The average concentration in dog bones, where the animal has been given lead daily in considerable amounts over a period of years, is only 4-5 milligrams per 10 grams of bone and the highest amount I have ever obtained was in severely and fatally poisoned rats, where the concentration was about 14 milligrams per 10 grams of bone. Human bones, in individuals who had been exposed to lead, usually have a lower concentration than the dog bones referred to.

In carefully decalcified bone in which the calcium is removed and the lead left in situ, the deposited lead can be revealed by conversion to distinctive crystalline material or even by staining with a basic dye such as methyl green. Small as it is, the lead is well distributed in the bone tissue. It is found highest in the cancellous portion in the early stages of absorption, but later the compact tissue shows about the same concentration. The deposited lead reveals its own pattern on staining and the general bone structure is outlined entirely by the particulate lead. In the early stages of lead deposition the lead is deposited as a colloidal mass.

It should be pointed out that the deposition of lead in bones is not necessarily confined to the calcified areas but also occurs in the epiphyseal marrow. One peculiarity I have noted, furthermore, with reference to lead deposition in bones, is a sequence of deposition beginning in the marrow. Lead is apparently not deposited in the diaphyseal marrow, but is found in considerable amount in the red marrow. In guinea pigs intensively poisoned with lead over a period of two weeks there was a slight, rim-like deposit of lead about the fat cells as compared with normal marrow. In animals given lead over a long period of time, numerous fat cells of the marrow contain lead consisting of crystalline aggregates which in some cases practically fill the fat cells. One can infer that the first stage in lead deposition is an accumulation of colloidally dispersed lead which later becomes crystalline. The reason for the self-limitation of deposited lead which I have previously referred to is much less apparent. However, the deposition of lead in the red bone marrow, which is actively concerned with red cell formation, is perhaps not without significance with reference to the anemia characteristic of lead poisoning.

CADMIUM

Cadmium, like chromium, although long known in industry, attained its present commercial importance only when its valuable plating characteristics became apparent, about twenty years ago. As a coating material it forms a closely adherent film with less tendency to crack and pit than zinc and is particularly resistant to corrosion. For this reason it is especially suitable as a coating material for marine hardware. Moreover, the development of new plating methods greatly facilitated the application of cadmium, so that the use of this type of plating has become more or less widespread. The difference between zinc-coated and cadmium-coated steel is apparent after some experience, although at first glance they appear similar. In general, cadmium-coated articles of steel usually have a smoother, noncrystalline appearance. However, it is easy to mistake one coating for the other and therein lies a certain amount of industrial tragedy. In the flame or arc-

welding of cadmium-coated metals, brown cadmium oxide is volatilized and the inhalation of this material produces chemical pneumonitis, often with fatal outcome. It is unfortunate that these fumes cannot be detected by either taste, smell, or immediate irritant effect. In this they resemble carbon monoxide. However, apart from this lack of warning, they are far more vicious than carbon monoxide. A characteristic effect of exposure to cadmium oxide fume is that of delayed action. The effects only begin to appear three or four hours after exposure. The first symptoms of industrial cadmium poisoning are usually dryness of the throat, cough, headache, vomiting, and a sense of constriction of the chest. The later symptoms are referable principally to the respiratory system and are characterized by cough, pain in the chest, severe dysphoria, and prostration. These symptoms result from a pneumonitis which in many instances is followed by bronchopneumonia. According to Spolyar, the fatality rate of industrial cadmium poisoning appears to be 15 percent. A total of eleven deaths due to inhalation of cadmium oxide fumes had been reported up to 1946. Ross has recently cited a case of mass poisoning in England in which twenty-three individuals were affected. In this instance, finely divided cadmium dust from a cadmium recovery chamber was ignited by red hot cigarette ash carelessly dropped by one of the workers. While no fatality occurred, some of the cases were seriously incapacitated, the disability duration amounting to as much as two months. As a result of cadmium poisoning arising from the heating of cadmium-coated metal, with the attendant formation and volatilization of dangerous quantities of cadmium oxide, there has been agitation for labeling cadmium-coated metals. While this doubtless will be effective for large pieces, it will be somewhat difficult to control as a means of protection when small objects are so coated.

Although it is somewhat apart from industrial exposure to cadmium fume, I should like to draw attention to another phase of cadmium poisoning that arises from the careless use of cadmium-coated vessels as food or drink containers. The entire toxicological literature contained reference to only twenty cases of this type down to January 1, 1941. However, within the five-year period from that date there have been reported 639 cases of poisoning by ingestion. No doubt additional cases may have occurred but were not reported. It is sometimes difficult to trace the origin of such gastro-intestinal upsets. Furthermore, it is usually necessary to analyze the food or drink in order to find the causative agent and this is usually done only in outstanding cases. For instance, the above figure of 639 cases does not include the cases aboard a United States destroyer during the war, believed to be due to cadmium poisoning, in which 70 percent of the personnel aboard ship were incapacitated.

A significant feature of cadmium poisoning by mouth, in contrast with poisoning by inhalation, is the rapidity of physiological response. Usually individuals are affected within 15 to 30 minutes after ingestion of food or drink containing toxic amounts of cadmium.

COBALT

Another metal that has attained marked prominence in industry within the past 15 or 20 years is cobalt. Prior to 1930 cobalt was more or less of academic interest. Two large-scale industrial uses for the metal have occurred since that date. First of all, a curious alloy of cobalt, nickel, and aluminum, has been commercially developed which has been shown to have magnetic properties far surpassing any other metal—such as steel or steel alloys—to date. This magnetic alloy, called Alnico, is capable of lifting 60 times its own weight.

A second large use for cobalt occurs in the cemented tungsten carbide industry. In this case cobalt is used as a bonding agent for tungsten carbide which is one of the hardest substances known. The component substances used in this industry are carbon and tungstic oxide, cobalt oxide and certain other metallic compounds, including titanium oxide and corresponding tantalum or columbium compounds. These are intimately ground in ball mills with tungsten carbide balls until the particulate powders are reduced to less than a micron in diameter and are exceedingly evenly dispersed. The material is formed into blanks, sintered in hydrogen furnaces at high temperatures, and the blanks are brazed on to steel shanks which form the cutting tools or dies of industry.

The manufacture of cemented tungsten carbide tools is growing rapidly and is essentially a key industry as these tools are used throughout the automobile and other industries wherever machine work is done. Machine operations are speeded up beyond anything possible with ordinary high speed steel tools. Coincidental with the rapid growth of this industry, the question arose regarding possible injurious effects from inhalation of the metallic dusts. The Division of Industrial Hygiene of the United States Public Health Service, at the request of several states, has recently completed a field investigation of this interesting industry in order to find if any health hazard exists.

Returning for the moment to cobalt, it may be said that its toxicity by mouth is low. Intravenously injected, it produces polycythemia, the dust produces dermatitis, and is thought by some to cause an asthmatic condition on inhalation. To what extent, if at all, cobalt is a factor in the health of employees in the cemented tungsten carbide industry will await the final evaluation of the health data of this field investigation.

VANADIUM

As contrasted with cobalt, the toxicity of vanadium is of greater interest to the industrial hygienist—not because a greater number of employees is exposed to it—but rather because of its poten-

tial danger. In the field of metallurgy vanadium is of hygienic importance, where its dust is concerned, but this is not true once it is formed into metal or its numerous alloys. In other words, there is practically no fume or dust exposure in machining operations with its alloys. However, exposure to the dust of even the crude ore is a serious matter. In experimental work carried out in our division, animals exposed to dust from the crude ore patronite were very quickly affected. (Patronite is largely vanadium sulfide ore, the form in which it is imported into this country.) These animals, although exposed to the dust for only forty-five minutes, showed a mortality of practically 100 percent within two to three hours after exposure. The dust is apparently extremely irritating and causes edema of the lungs, so that the animals drown in their own tissue fluid.

Within the past few years vanadium poisoning has been reported in Italy among laborers occupied in extracting vanadium from petroleum ash, in Germany among metallurgical employees, and in England with workers exposed to vanadium pentoxide.

In addition to its important use as a constituent of special alloyed steels, vanadium has outstanding importance as a catalyst for various chemical processes. It is, for instance, especially useful in converting naphthalene into phthalic anhydride, so necessary in the plastics industry, and toluene into benzaldehyde. Above all, it is rapidly replacing platinum in the catalytic oxidation of sulfur dioxide to sulfur trioxide in the manufacture of contact sulfuric acid. The consumption of vanadium has increased more than tenfold since 1936. This increased use of vanadium, together with its known toxic effects, should be of particular interest to industrial hygienists in affected areas.

MOLYBDENUM

It has been noted that in rolling hot billets of molybdenum steel white fumes are given off, owing to superficial oxidation of the molybdenum. As molybdenum steel is of great importance as armor plate, the production of this material increased extensively during the war. The question of possible danger from the inhalation of these fumes was therefore a matter of early interest to our division. Unfortunately, very little investigation of the toxicity of molybdenum and no investigation whatsoever of molybdic oxide fumes had been made up to that time.

Molybdenum is of importance primarily in the production of engineering steel but is largely used also in high speed steel, and to some extent in pigments and colors, and welding rod coatings, and it has miscellaneous chemical applications. The United States produces 93 percent of the world's output and the consumption in this country reached over forty-five and one-half million pounds in 1942. Our investigation indicated in brief that molybdenum has a low order of toxicity although, of course, heavy exposure to the fumes or dust of its compounds and molybdic oxide in particular should be avoided. Soluble salts such as sodium molybdate were shown to be less toxic than either sodium chromate or sodium tungstate. The localization (I hesitate to call it storage) of molybdenum in the various tissues and organs of the body, following the oral administration of calcium molybdate and of molybdenum trioxide, occurs principally in the kidneys, bones and liver.

There is one feature of interest that I would like to refer to in connection with this investigation of the toxicity of molybdenum. In order to produce molybdenum fume we used a device similar to that which we have employed for the production of other metal fumes, i.e., arcing across a 110 volt d.c. circuit with one-quarter inch molybdenum metal electrodes. Abundant fumes are produced by this means and animals may be exposed to high concentrations, but contrary to our experience with molybdic oxide dust, a lower grade of toxicity was experienced. A pronounced toxic effect had been anticipated in these experiments, since most metallic oxides in the fume state are more immediately toxic than the dust. However, a lower grade of toxicity was apparent with the fume than with molybdic oxide dust. Some explanation of this effect was sought in the rates of solution of the different substances since other experimental work in our laboratory had indicated this may be a factor to be considered with reference to toxicity. Solution rates were determined of molybdic oxide fume, elutriated molybdic oxide dust, and the coarser reagent grade of molybdenum trioxide. These materials were shaken with distilled water in bottles in a constant temperature water-bath and samples filtered and analyzed for molybdenum at intervals. The solubility of the fume is unmistakably greater than that of the coarser particulate material. These experiments indicate that it is possible that the much more soluble fume is more immediately neutralized, diluted and swept away, while the more coarsely particulate oxide dissolves relatively slowly in local contact with cellular tissue, diffusing therefore only slowly, building up high concentrations of molybdic acid locally, and damaging the cells with which it is immediately in contact. I mention this particularly since it may contain a possible hint with reference to the still unknown cause of the effect of particulate silica in causing silicosis.

ANTIMONY

In antimony we have one of the most colorful of the metals, with a history extending into ancient times. Evidence exists that it was known as a metal as far back as 4000 B.C. and certain of its physiological properties were certainly known by the Romans, as exemplified by their use of cups made of the antimony metal referred to above. Antimony acquired great renown medicinally in the Middle Ages, but this application slowly died out. By the turn of the present century antimony had very little, if any, pharmaceutical interest. In industry, however, antimony has become an important

substance and, of course, its very great importance within the past thirty years, in the treatment of schistosomiasis and allied diseases, particularly during the last war, is well known.

The total consumption of it in the United States is about 20,000 tons and the number of workers engaged in all forms of industry handling this material is about 100,000. In comparison, about 1,000,000 tons of lead are consumed in the United States annually and there are about 1,000,000 workers engaged in the lead industry. Roughly speaking, therefore, there are about 5 men engaged in handling 1 ton of antimony in comparison with 1 man per ton of lead. By far the greater amount of antimony in commerce enters into the composition of alloys. In automobile production large amounts of antimony alloys are used in bearing metals and in storage batteries. Antimony has the property of hardening lead, and antimonial lead containing up to 4 percent of antimony is therefore used in the framework of the plates of storage batteries. About half of the total American consumption of antimony goes into the lead alloy for battery plates. Type metal, pewter and lead-antimony electrodes for chromium plating baths account for a substantial amount of the metal. Large amounts of crimson antimony and golden antimony are used in the rubber industry, while the oxides are used in paints and as opacifiers in enamel.

In view of the close chemical similarity of arsenic and antimony, it would be assumed that working with this substance or its compounds would be particularly hazardous in industry. It is true that certain soluble salts of antimony, such as potassium antimonyl tartrate, or tartar emetic, are very poisonous. Yet workers handling the oxides, sulfides, or the metal itself, under conditions where exposure to the dust or fume is severe, do not complain, and relatively few cases of antimony poisoning exist in the industrial hygiene literature. In fact, the well-known instance of the use of antimony compounds to "condition" race horses and its aid in fattening geese at Strassfurt for the preparation of foie gras has led some to consider small amounts more beneficial than otherwise.

However, experimental work in our division has shown that antimony metal and its chief industrial compounds are definitely toxic. Without discussing this experimental work in detail, it may be sufficient to indicate that the toxicities are of the following order: the oxides are the least toxic, the sulfides are of intermediate toxicity, and the metal is the most toxic. The pentavalent compounds were invariably less toxic than the trivalent compounds. When the rates of settling of the various dusts and fume were compared, curves of the usual die-away type were obtained. The measured settling velocities compare favorably with values calculated from Stoke's law based upon the particle sizes and densities of the material. These curves are of interest in that they indicate that fine antimony dust remains in suspension much longer than would be anticipated for such a heavy metal. The metal powders easily, however, and it is perhaps significant, in view of this fact and its relative toxicity, that some of the few cases of antimony poisoning that have occurred were noted in workers engaged in breaking up this metal.

Although not of direct industrial interest, any mention of antimony poisoning would be incomplete without referring to the use of antimony enameled ware for the preparation and storage of food. With the increasing scarcity and cost of tin oxide, which is an ideal opacifier for enamels, both antimony trioxide and antimony pentoxide have been substituted for this substance. Within recent years several cases of mass poisoning involving at least 163 individuals have been reported, which were definitely traced to antimony enameled containers. In about half of these cases the illness was sufficient to require hospitalization. Doubtless many individual cases have occurred where the enameled vessel was never suspected.

In our animal experiments where antimony or its compounds were administered by mouth, by intraperitoneal injection or by inhalation, definite pathological changes were noted which might escape observation by the usual methods of fixing, clearing and sectioning. Notably there is a pronounced deposition of fat in the liver. When stained with Lillie's Sudan IV stain, the section from the liver of an unexposed guinea pig is normal in every respect, while liver sections of antimony-exposed guinea pigs reveal the deposition of much fat.

In consideration of all the factors involved, antimony appears to be more toxic than lead and it is suggested that permissible concentrations to which workmen are exposed should be kept to a minimum.

Before ending this discussion it might be well to indicate the importance of the values which are in current use for maximum allowable concentrations of gases, vapors, fumes and dusts in industry. A very great responsibility rests with the industrial hygienist in this regard. At the same time decisions regarding maximum permissible concentrations are difficult to make. In most cases these decisions have been based upon animal experiments which, while affording information regarding acute or chronic toxicity, are less useful in arriving at values referring to concentrations to which workers may be exposed safely for eight hours daily—perhaps for years.

The plant physician and industrial hygienist can be of the greatest assistance in noting any characteristic, however minor, related to exposure of workers to toxic materials. While many substances can be absorbed daily in low concentrations and still be metabolized without injury of any kind, the continued impact of many other substances may be a matter of concern. Doubtless observations of the type referred to will be of the greatest assistance in arriving at maximum allowable concentration values useful throughout industry in general.

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THE JOURNAL'S PLATFORM

1. **Preservation of American Medicine through voluntary service to the sick.**
2. **Advocating full-time county or district health officers, locally appointed.**
3. **Restoration and preservation of our natural waters and resources.**
4. **Maintain the present high standard of the Indiana University Medical Center, combining the full medical course in Indianapolis.**
5. **Elimination of diphtheria and smallpox through immunization and vaccination.**
6. **Support of the state-wide campaign against undulant fever.**

Editorials

THE FRESHMAN CLASS

THERE was a time, long, long ago, when medical schools conducted an "enrollment" campaign. The number of prospective students was indeed at a low ebb. But, as of today, this has become a mighty problem; there are not enough openings to accommodate all who wish to enter upon the study of medicine.

Some years ago, this job of selecting medical students was in the hands of a very few persons, but today there is a large group which controls the process.

The Association of American Medical Colleges, probably foreseeing just what is actually happening today, brought into being the "aptitude test," which was conducted in most colleges offering premedical courses. For many years there was much opposition to this innovation, but today it is generally recognized as eminently worth-while. Our dean at Bloomington, Dr. Myers, was one of the sponsors of the idea.

No sooner did the registration of first-year medical students begin to slacken than there was a mighty wail, here and there; right here in Indiana the writer was importuned to "use his influence" to get some young man a coveted spot. On one or two occasions we did endeavor to find out what it was all about, but soon decided the educational folk knew what they were doing.

Then came the "faculty committee," which still exists in most medical schools today. As we recall, the Indiana University School of Medicine committee consisted of twelve faculty members. This group served as a sort of "screening" process, each applicant being interviewed by two or three faculty members. Today it seems it is in general use in most institutions.

In the past few years we have talked to literally dozens of young men who had failed to make the freshman year and in most instances the reply was, "Oh, well, I know my premedical grades were low, but I knew I could make that up, once I got into the real medical school."

Now, what has happened to all these young aspirants? Many of them have entered low-grade schools—of which we still have too many in this country; others have gone into other professions, while a still larger number have just "passed it up."

As a matter of fact, there are not enough openings in the medical schools of this country for all applicants, hence the necessity of drawing strict lines of admittance.

We have seen no recent figures from our own medical school, but have no doubt but that they are comparable to those in other states. Recently we went over the report from Illinois University, which showed that about 20 percent of the applicants were admitted to the freshman class.

One factor all too frequently overlooked is the fact that hospital teaching beds must be available to medical students. Here in Indiana, for example, we might enlarge the medical school buildings to the point where we could accommodate twice the present enrollment, but what of teaching beds?

True it is that we need more doctors throughout the nation, but these cannot be had without proper education—which costs a lot of money—not only in medical school buildings, but in teaching-bed hospitals. It is, of course, a big problem, one that must be solved from many standpoints.

SOME OBSERVATIONS ON MYOPIA

For various reasons there seems to be quite some misunderstanding regarding this important subject. Myopia, commonly called "near sight," is rather widely spread and its management calls for a most intelligent understanding of what it is all about.

We have been observing various manifestations of it for a period of more than four decades and often have been nonplused by some of these observations.

In the beginning, we must consider the myopic eye as a "long eyeball." On the other hand, the hyperopic eye is a "short eyeball." There are many considerations that must be taken into account when we begin a study of myopia. First, as we consider it, the patient with myopia usually inherits the condition. We have studied case records covering a large family and find that myopia very commonly is present in the greater percentage of these families. We have records covering as many as four generations and, while myopia is not found in all members of the family group, it is observed frequently enough to confirm the theory of heredity.

All too often when examining a patient with this affliction—and it is just that—we are told that as a youngster the patient had had glasses for a time and the "doctor" has suggested "you will outgrow this condition." In our rather long experience we have never known a true myope to "outgrow" the difficulty.

On the other hand, it has been our experience that myopia increases as the youngster grows older—this is not always the case, but it is the rule.

Very occasionally we have met up with a case which we have heard called "malignant myopia"; the rate of increase in the defect is very high and in due time the patient has lost most of his vision. We recall such an instance in a young man who had served in the first World War. From the army records it appeared that he went into service with normal vision.

Later on he was sent to us by the Veterans Bureau and our finding was that he required a correction, both eyes, of —25.00 sph. We received a letter from the chief at the Cincinnati office, questioning our finding. Later this young man was sent to the late Dr. E. J. Lent, of South Bend, who reported a finding of —28.00 in both eyes, with very little improvement in his vision. Still later, the late Dr. John R. Newcomb, Indianapolis, was given the case, and his finding was —32.00 sph. in both eyes. Later on we were advised that the man was practically blind and had been awarded a 100 percent disability.

Our records include probably two or three such instances, but they are rare, in our experience.

One of the problems confronting the eye physician in cases of myopia is "When shall I wear my glasses?" Our invariable answer, in cases of rather a high degree of the affliction, is "Just when you have your eyes open." It has been our experience that the constant use of glasses in such cases will do more to retard the progress of the condition than any other factor.

All the above is written from the standpoint of an eye physician who is not engaged in any "research" work; rather does he rely on a rather broad experience in the handling of these cases. In conclusion, we make the following observations:

Do not tell your myopic patients that they will "grow out" of the trouble—they just don't; the myopic patient, where the error is of considerable degree, should wear his glasses constantly; their eyes should be checked yearly, in the younger group.

Finally, notwithstanding the various books that have been written on the "throwing away of glasses," the myopic patient seems doomed to go on and on with his glasses.

M.D. — 1948

Some four thousand Indiana cars are on the road with this caption on the license plates. Secretary of State Bath and H. Dale Brown, Director of the Indiana Motor Vehicle Registration Bureau, thought up this plan some time ago and put it into execution.

The idea was, so far as possible, to use the office

telephone number of the doctor on the plates, such as M.D.—517, Indiana, 1948.

Most physicians were pleased with the plan and their cars now go about the country with the plates as described; so far as we have been able to learn no other state ever carried out such an idea.

But, as is ever the case, there are some flies in the ointment; first, we have a lot of imitators of the medical profession, some of whom just about take over.

A check has been made by licensing authorities, resulting in the discovery that at least three medical students, one intern, and a dentist are using such plates—just how they came by them has not as yet been determined. And, just to make the story a good one, an osteopath and a chiropractor have "blossomed out" with the new-style plates. And, according to Miss Ruth Kirk, executive secretary of the State Medical Board, there are some of the plates in use by persons in no way connected with the healing arts.

All these offenders are being asked to surrender their plates, and if they refuse, the Indiana State Police will march in, snip 'em off—and there you are.

In connection with the subject, we have heard some criticism regarding the new plan—coming from medical men; they aver that the plates identify the car as belonging to a doctor and drug addicts are thus attracted to them.

One other observation on the subject—Ross Sensenich, President of the American Medical Association, carries license plates reading, "M.D., 1, Indiana, 1948."

We will wager that Ross would not exchange this plate for one reading "*1, Indiana, 1948," which means the car of the Governor of Indiana.

Editorial Notes

One of the busiest doctors we ever have read about is located up in Northern Manitoba, Dr. Cameron Corrigan, connected with the Indian Service. There are some 4,000 Indians under his medical jurisdiction and by using a plane, snow sled and whatnot, he manages to see most of them every year.

Once each year these folk come to a central point known as Norway House, there to collect the little stipend that the Canadian government gives them as the result of a peace treaty many years ago.

Dr. Corrigan takes advantage of these visits to check up on the health of his charges, administering vaccines and other disease-preventing materials. There is a little, 30-bed hospital located there, and Dr. Corrigan hopes to see it enlarged to double that capacity in a year or so.

Time magazine, June 7, gives an interesting story of the work of Dr. Corrigan.

Our state medical board seems to be clicking right along, as well we knew it would, once it had proper financing. We note in a recent press report the fact that two Indiana physicians have had their licenses revoked because of criminal abortion. In another case a drugless practitioner who, it seems, held a rather wide assortment of licenses, lost all of them at one fell swoop.

A bit of personal interest was had in the case of one of the alleged abortionists. A long time ago, when we were a board member, we recall the president of the board admonishing him to "watch his step." He had been called in for a rather vague connection in another case, but was not found guilty. The head of the board, however, remarked that sooner or later this young man would be caught short, which it now seems he was.

We read an item in a Chicago newspaper the other day that pleased us, very much. It concerned a family of rather large proportions that had planned to make a home visit to Ireland. As a matter of fact, the family consisted of the father and mother, together with 13 children! And, they were not traveling second-class and steerage—they left Chicago aboard one of the "crack trains," occupying a drawing room, two compartments and two bedrooms!

We would like to have seen them entrain, this family consisting of children from a few months of age up to fifteen, and we particularly would have liked to be in their native land, when they arrived to see "grandma."

Such little items as these appeal to us; they go to show that America is the *one land* where such things can—and do—happen.

WANT COPY OF CENTENNIAL BOOK? IF SO, ORDER IT TODAY!

Because of the expense involved in printing *One Hundred Years of Indiana Medicine*, the book being published in connection with the association's centennial celebration next year, the Council voted to order only enough copies to fill advance orders. The books will sell for $2.00 each, which is below cost, plus 20 cents for postage and wrapping, as a centennial feature.

To make sure you will get a copy of this interesting and unusual book . . . and certainly every Indiana physician will want one . . . send in your order TODAY! Complete details, including the order blank, are contained on the pink page inserted in this issue of "The Journal."

President's Page

INCREASING HOSPITAL COSTS

A SURVEY of hospital costs in Marion County, recently made by the Indianapolis Hospital Council, reveals that the average patient day cost was 2.26 times greater in 1947 than it was in 1938. The increases in hospital costs were found to be almost identical in the general hospital group and the special hospital group, which emphasizes the difficulties that all hospitals are now encountering.

The greatest proportionate increase in cost was the total cost of drugs, which was 4.36 times greater than in 1938. Linen and bedding was 3.33 times more expensive, and salaries were 2.65 times greater. All other items, such as food, fuel and other supplies, were considerably higher than before.

When an analysis was made of the total cost of operation of the hospitals, it revealed that salaries were by far the greatest item. In 1938, 50.4 percent of the cost was for the payment of personnel, while in 1947, 59.1 percent of the expenses was for the same item. A breakdown reveals that 50.2 percent of the amount charged to salaries was paid for professional and personal service, such as nursing, therapy, resident staff, medical records, laboratories, x-rays, drugs, surgery and other professional service departments.

The greatest relative increase in cost was for drugs. In 1938, 2.6 percent of the cost was for drugs and in 1947, this figure was 4.9 percent of the total cost. This increase is probably due to the greater use of various vitamins and the antibiotics.

The report shows that the patient days increased from 694,510 for all hospitals in 1938 to 896,185 in 1947, or was 1.29 times greater. However, in 1938, 41,459 patients were admitted to the general hospital group, while in 1947, that number of admissions was 80,112, or 1.9 times greater. The survey further shows that in 1947 the number of employees was 1.64 times greater than in 1938.

Briefly, patient days have increased 1.29 times, the number of patients admitted has increased 1.9 times, the number of employees has increased 1.64 times, and the cost has risen 2.26 times per patient day. The increases in cost are very much in keeping with the decline of the value of the dollar generally, but they are greater than the present index. This can be explained partially by the fact that the shortened stay of the patient has made per diem cost greater because it requires more help and more work to accommodate a changing occupancy than a static one. Also, hospitals are supplying a greater variety of services than previously.

I have cited these figures because they probably represent the condition as it exists elsewhere throughout the state. The burdensome cost of hospital care is of concern to the medical profession, because the public considers it a part of its medical care expense. When it cannot meet it, it begins to turn to the government for assistance and becomes an advocate of some form of state medicine.

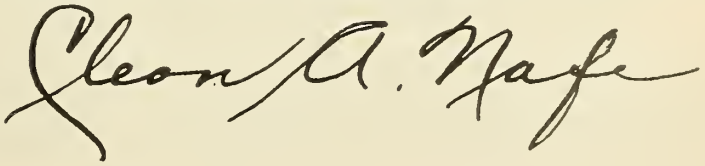
Blue Cross has attempted to meet the full cost for hospital care for a limited period of time for patients occupying ward beds. This rapidly increasing cost has made it necessary for them to increase the charges for their coverage and it probably will be necessary to increase the premium rate again if the hospital costs continue to increase.

Unfortunately, the very fact that Blue Cross pays the major portion of the hospital bill, and has tried to meet this unpredictable expense adequately, has increased hospital problems. Undoubtedly hospital insurance has increased the number of patients going to hospitals, and tends to prolong their stay. Since it also pays for some professional services, such as laboratory and x-ray examinations, as well as for drugs, often the physician is inclined to be unnecessarily liberal in his use of these facilities. Also, it is not uncommon for a patient to request many of these things, even though the physician has not advised them, because he feels that they are already paid for, and he wishes to secure all that is coming to him. Both of these factors tend to increase hospital costs.

Patients have become health-conscious and clinic-minded. They have come to believe that if they will only be x-rayed and laboratory tested, the answer to their health problems will be forthcoming. They want an electrocardiogram to see if they have heart trouble, a blood count to see if they have appendicitis, or a basal metabolic test to find out if they have thyroid trouble. Many believe that an x-ray picture or pictures will settle every question. Unfortunately, too many physicians seem to feel the same way, and often request all of these examinations even before they have taken a good history or made a careful examination that would tell the story. We have all become routine-minded and every patient has to have certain routine examinations, many of which are of no value in a given case. All of these services increase hospital costs.

Physicians cannot change this trend entirely, but hospital costs could be materially lessened if many unnecessary laboratory and x-ray procedures were eliminated, if intravenous infusions and blood transfusions were utilized only when necessary, and if the antibiotics, vitamins, and other expensive drugs were used more discriminately. It might be well if each of us would examine the hospital bill that each of our patients has to pay, or even pay a few ourselves. Then we probably would use these facilities more wisely.

Hospitals are great institutions. All of their facilities are essential. Without them, physicians would be comparatively helpless in caring for the ill. Their many useful functions should be expanded and not curtailed. However, there are many ways in which physicians can reduce the cost of hospitalization by using the hospital's facilities wisely. This is a problem that merits the attention of each individual physician.



THE DOLLARS AND SENSE OF PUBLIC RELATIONS*

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MANY people get their impression of public relations from lurid newspaper stories, but this type of activity is not typical of reputable public relations personnel. Consequently, at the risk of being trite, I shall begin my remarks with a definition of public relations.

A short time ago *Public Relations News*, a trade paper in the public relations field, conducted a contest for the best definition of public relations. It might be well for us to consider what the people in the profession think is the best analysis of public relations. Here is the winning definition:

"Public relations is a continuing process by which management endeavors to obtain the good will and understanding of its customers, its employees, and the public at large — inwardly through self-analysis and correction, outwardly through all means of expression."

That definition was submitted by J. C. Seidel, Public Relations Director of the Division of Housing of the State of New York.

In some ways the definition which came out second best in this contest might be more applicable to the medical field than the first. This conception was the work of W. Emerson Reck, Public Relations Director of Colgate University. Here it is:

"Public relations is the continued process of keying policies, services, and actions to the best interests of those individuals and groups whose confidence and good will an individual or institution covets; and, secondly, it is the interpretation of these policies, services, and actions to assure complete understanding and appreciation."

By combining the best in each of these two prize-winning definitions and applying it to the medical field, we have something like this:

"Medical public relations is a continuous process by which the medical profession endeavors to obtain the confidence and good will of the public —inwardly by self-analysis and correction to the end that the best interests of the people will be served, outwardly by all means of expression so that the people will understand and appreciate that their welfare is the profession's guiding principle."

It seems to me that, in order to develop a public relations program based upon this definition, three things are necessary:

1. The proper philosophy or attitude or approach to the problem at the policy-making level.
2. Money.
3. Qualified personnel.

What is the proper attitude toward a public relations program? Medical society policy-makers must realize that the enlightened conduct of individual physicians and the worth-while activities of medical societies are the only raw materials out of which a successful public relations program can be developed.

There must be sincerity of purpose and a determined effort to do what's right by the people. Those who sponsor it must have faith in the public relations program. It will fail if it is started as a half-hearted experiment. There must be willingness to submit to truth, frankness, and absolute candor. Unless this is accepted as fundamental, the effort will degenerate into an attempt to fool the public and *the people do not enjoy being fooled.* We cannot be hypersensitive. Those responsible must be ready to listen to criticism and to accept public opinion as a reality—even though that opinion is based upon misinformation. Medical leaders must be aware of the profession's responsibility to all sections of the public. There is no hope for a medical public relations program designed to attract those who wear Phi Beta Kappa keys and ignore the laborer who signs his name with an "X."

Public relations cannot be wrapped up in a package and delivered. It is neither a cover for shortcomings nor a substitute for good works. Good public relations, in fact, depends upon good works. It cannot exist in a vacuum, and it cannot be created by the alchemy of some magic formula. Successful public relations must be built upon the foundation of accomplishment.

If the activities of medical societies or the efforts of individual physicians are characterized by fumbling, confusion, and selfishness, no man alive can do a good job of public relations for the profession. If, however, its accomplishments are characterized by clarity, foresight, and unselfish regard for the health and welfare of all the people, its public relations problem is more than half solved.

The logical approach, therefore, to the problem of medical public relations begins with an effort to make our policies unassailable, our program so important to the people themselves that it cannot be ignored, and our accomplishments so concrete and so clear-cut that they cannot be distorted, even by the mental and emotional astigmatism of our enemies.

* Presented before the Indianapolis Medical Society, at Indianapolis, on April 13, 1948.

† Executive Secretary of the Medical Society of the State of Pennsylvania.

The development of fundamentally sound public relations is a long-range permanent program rather than a sudden achievement. There is no such thing as a short campaign of public relations. Either it's ceaseless or it isn't public relations. Good public relations demands continuous analysis and appraisal of our objectives, adjustment and readjustment of our program, adequate follow-through in terms of action and accomplishment, and constant effective interpretation. That's a large order which will not be filled in a day or in a year; but any other approach to the problem of public relations is superficial and self-deceptive, leading us down a blind alley of chaos and frustration.

When I first began an intensive study of public relations, about a year ago, I was impressed by two factors: first, the broad scope of public relations; second, its spiritual quality. And by spiritual I mean *spiritual*. As I turned over in my mind this spiritual aspect of public relations, I began to wonder if I wasn't becoming intoxicated by the beautiful idealism of the concept and, as a result, indulging in a sort of blessed "binge" which left me somewhat "pie-eyed" with piety—until one day I came across a quotation from the writings of Rex F. Harlow, Associate Professor of Public Relations of Stanford University and President of the American Council on Public Relations. This is what Mr. Harlow wrote:

> "The Golden Rule is the key to all deep understanding of human reaction. It is, therefore, the foundation of all good public relations. Whether fully recognized or not, it is the basis of all successful efforts to improve the public relations of any business, any educational institution, department of government, or economic or social organization."

Let us examine the proper approach to public relations by means of a few specific examples. To do so, we must consider some unpleasant things. That should not be difficult for the medical profession—you are dealing constantly with them. Cancer isn't pleasant. Neither is syphilis nor spreading peritonitis. But you know better than I that these pathologic conditions must be faced realistically. Treatment for public relations ills, like medicine, is not always palatable.

Before going into detail, I should make clear that I am not charging the medical profession—either directly or by implication—with blindness regarding its responsibilities. If the whole story were known, the people would hail the progress which has been made in medical service. They would recognize the profession's amazing devotion to duty. But the whole story is not always known.

A lot of people today are sore at the medical profession—up-in-arms over some grievance, either real or imaginary. These people aren't all crackpots. Most of them are average Americans.

Much of this grousing, I grant you, is undeserved — unreasonable — unthinking — often based upon a single unpleasant experience with one doctor. Whether or not it is unjustified, it *is* real. It exists. And it is your problem to meet it—and conquer it.

You cannot afford to discount the challenge you face today. Why? Because of the powerful appeal of state medicine offered by left wing forces as a blueprint for medical progress to the man in the street. You know it's a faulty blueprint. I know it's a faulty blueprint. Nevertheless, the public—which is questioning your good will as a profession—is being sold this Utopian blueprint as the answer to all its medical problems.

The medical profession itself, I think, would be the last to contend that the practice of medicine has no shortcomings, that there is no room for improvement, that no abuses remain to be rooted out and eradicated.

The disciples of state medicine have seized upon these abuses, have overemphasized and oversimplified the problems, and have held them up to public view as justification for the program they champion.

You owe it to yourselves and your patients to disarm your foes, to take away their weapons. Many people today are only too eager to believe anything uncomplimentary about doctors. As students of human nature, you know that often it is not the truth which governs, but rather what people believe—often mistakenly—to be the truth.

You can't solve this problem by laughing it off. You can't solve it by denying its existence. You can solve it only by an aggressive and positive program of correction and interpretation.

What are you being criticized for today? Well, here are a few things: accepting rebates and kickbacks, unavailability in emergencies, fee-splitting, overcharging, performing unnecessary operations, giving medical care of poor quality. These are not figments of my imagination or criticisms made by isolated individuals in personal conversation. Every one of these accusations has appeared in print—sometimes in newspapers, sometimes in general magazines of wide circulation, sometimes in medical publications, sometimes in all three, usually not once but repeatedly.

I would like to quote directly from a few of these sources, and then in each instance give at least one illustration of what some progressive medical society is doing about the problem in question.

The January, 1948, issue of *The Reader's Digest*, which has the largest magazine circulation in the world, contains an article entitled "Better Vision—With a Kickback." From that article I quote three short but incisive paragraphs:

> "In 1942 the House of Delegates of the American Medical Association formally condemned eyeglass rebates, calling the practice 'basically dishonest,' and pointing out that 'all such unethical practices are disreputable and unscrupulous and, if not controlled, may

soon besmirch the reputation of the entire medical profession.'

"This resolution called upon county medical societies to subject violators to disciplinary action. In August, 1946, the resolution was again called to the attention of physicians.

"Organized medicine seems to have contented itself with these verbal condemnations. More than a year ago the Government published the names of the 52 physicians who had accepted half a million dollars in rebates. Until this writing not a single one of them has been disciplined by the medical societies."

Rebating to ophthalmologists by optical companies is either right or wrong—it can't be both. It is not my purpose to pass judgment on this practice. In fact, it is obligatory for one in my position to accept the verdict of the AMA House of Delegates, which has condemned the practice as dishonest, unethical, disreputable, and unscrupulous. According to *The Reader's Digest*, however, not a single physician has been disciplined by his county medical society for accepting these kickbacks.

These facts—and their acceptance by the millions who read *The Reader's Digest*—can do more harm than can be overcome in a year with all the money and all the talent currently employed by the American medical profession in its public relations efforts.

This quotation is from a discussion of this problem:

"The housecleaning has been too long delayed. Biology has proved that any living organism that tries to maintain itself in the presence of filth invariably dies. The Board of Trustees of the American Medical Association, therefore, calls on leaders of the medical profession in every community to act promptly."

Those are strong words, and they are taken from a recent editorial in the AMA Journal signed by all the officers and every member of the Board of Trustees of the American Medical Association.

Every state and county medical society in the country is on the spot—put there *not* by Attorney General Tom Clark, *not* by Senator Claude Pepper, *not* by the newspaper *PM*, *not* by Michael Davis or Isadore Falk, but by the House of Delegates and the Board of Trustees of the American Medical Association.

Here is what the California Medical Association has done to get off that spot. On January 13, 1948, its Executive Committee voted to take the following steps:

1. Draft legislation for introduction in Sacramento to provide penalties for those found guilty of giving or receiving rebates.
2. Ask the Better Business Bureaus to exact pledges from their members that rebates would not be given or received.
3. Ask county medical societies to take disciplinary action against members guilty of rebate practices.

Well, enough of that. We've had two editorials on this problem in our state journal, and you've had two in yours. Moreover, I have been informed on good authority that the practice is at a minimum in Indianapolis. On that score, I congratulate you.

Let's look at another problem. On March 17 of this year, at our Secretaries and Editors Conference in Pennsylvania, we had John F. James, Editor of the Johnstown (Pennsylvania) *Democrat*—a daily newspaper—speak on the subject "A Newspaperman Looks at the Medical Profession." Here is a direct quotation from his remarks:

"There is the matter of your day off—Thursdays it is in my home town. The public resents what it feels to be a unionized withholding of services on a particular day of the week. The same criticism has been made of the difficulty of securing the services of a doctor over the weekend and at night.

"Now you know, and I know, that better than 80 percent of the people who think they are sick on Thursday could have decided to do something about it on Monday, or Tuesday, or Wednesday. Or they could wait until Friday.

"The same thing is true of symptoms which suddenly and unexplainedly develop after midnight or over the weekend, when you are trying to spend a little time with your family, or on the golf course, or in the relaxation of elbow-bending with friends.

"But Mr. Average Joe is as awed of you and of your skill as were his forebears of the medicine man or the witch doctor. His fear of the unknown and of pain isn't rational and analytical, but emotional and—to him—terrorizing.

"Too many of us patients regard the doctor not as a human being, with rights and privileges and a life of his own, but as a kind of Alley Oop of the comics, or a Ticktock of the Land of Oz, who neither eats nor sleeps.

"You know the psychology of your public better than I do, and you know how lacking in consideration some people can be. So I need not elaborate further on your side of this problem.

"But emergencies do arise—even on Thursdays.

"People do get genuinely and unexpectedly ill and hurt—on Thursdays.

"People even die—on Thursdays.

"And it is up to you to set up some sort of a centralized, rotating responsibility for taking necessary calls on these legitimate 'off hours.' Either that, or stagger your rest days.

"Sure, you can ignore this public criticism if you want to. But in failing to solve this problem, in refusing to correct this complaint, you strengthen the hand of the advocates of state medicine who are not above telling people that it would enable them to get a doctor at any hour and on the flimsiest of excuses."

You can answer fifty calls a week with dispatch and courtesy; but turn down the fifty-first call—and you will be criticized severely. If, by chance, the same patient is turned down successively by four or five other physicians—who likewise are serving the public well—a major issue is born and the whole medical profession is condemned.

"Unfortunately, this discordant note," explains Dr. Wilbur E. Flannery, Secretary of the Lawrence County (Pennsylvania) Medical Society, "detracts from any good service we may render, so it behooves us to meet not most of, but ALL of the demands for emergency medical service. It is evident that proper community provisions for adequate emergency medical service will make for good public relations."

There is an increasing demand everywhere for the development of proper facilities to handle emergency calls. The public feels that if the medical profession has assumed the responsibility of caring for the sick, it should also accept the

responsibility of providing medical service when the individual is unable to contact his family doctor or in any other emergency. This is an excellent project for every county medical society. Warren County in Pennsylvania is using its general hospital to handle and disseminate emergency calls. Dauphin County has met this problem with the formation of a medical bureau telephone service. Other counties are using the police and fire departments in maintaining twenty-four hour emergency service.

I have been advised of the plan now being developed to handle this problem here in Indianapolis. I can tell even from the little information I have about it that this plan has been carefully thought out, and I want to urge that you put it into operation as soon as possible because I am sure that it will improve your public relations.

Now, to still another problem. "The Truth About Fee-Splitting" is the title of an article in the February issue of *The Modern Hospital.* It was written by Greer Williams, who you may remember as the author of several articles on medical subjects published in *The Saturday Evening Post.*

"Doctors who like obscurities," begins Mr. Williams, "used to call it dichotomy, but the secret division between the surgeon and the referring physician of the patient's payment for an appendectomy or any other operation is better known as fee-splitting. Beyond the term itself, however, the subject is quite a mystery. Doctors who do not split fees know little about it, those who do split do not talk about it, and the profession as a whole is embarrassed by it. Nevertheless it happens."

After that introduction, Mr. Williams devotes several pages to a documentation of the existence of fee-splitting. He concludes with the following report of what one medical group did about this problem:

"The Columbus (Ohio) Surgical Society is the only professional organization of which I've heard that is making a frontal attack on fee-splitting.

"Two years ago, not only was Columbus the capital of Ohio, the campus of Ohio State University Medical School, and the home of 400,000 persons; it was also, Doctor N informed me, one of the nation's most split-happy communities. Then, on January 1, 1946, fee-splitting was almost entirely stopped—overnight.

" 'We weren't all fee-splitters, don't misunderstand me,' said Doctor N, an interested surgeon and close observer. 'But things were pretty bad. For example, one general practitioner refused to go on a night call, directing the patient to a hospital emergency ward instead. The resident called in a surgeon, and the general practitioner demanded a 50 percent split just for answering his telephone. Another physician walked through a hospital and saw the relative of one of his own patients on the ward. He got hold of the surgeon and insisted on a split.'

" 'In contrast,' said Doctor N, 'there were many conscientious doctors in Columbus who hated this commercialism. Two of them, both surgeons, hit on an answer after two years of figuring and planning. What they did was organize the Columbus Surgical Society—much like any other professional society, except for one thing. Each member was required to sign not only the American College of Surgeons' no-split pledge but also an agreement to submit his office records and accounts and *even his income tax returns* to an annual audit to determine whether he lived up to his word. Submitting a copy of one's income tax return seemed like drastic business, but each member signed a waiver to permit it. The by-laws provided that the society would hire a certified public accountant to make the audit and report any evidence of fee-splitting to the group.'

"Why, it may be asked, should a fee-splitting surgeon want to join a tough outfit like that? The founding surgeons gave him a pressing reason. From each hospital's board of trustees they obtained an agreement that only society members could hold positions on the surgical staffs. Approximately 97 percent of the city's surgeons accepted membership. Only about 10 percent, according to Doctor N, needed any real pressure to bring them in.

"But what, the cynic might now ask, would prevent a surgeon from joining and then keeping no records of his kickbacks or, as an alternative, letting the referring physician collect the money and split in cash? Well, for one thing, explained Doctor N, anyone can count a surgeon's operations; the hospitals schedule and record each one. If he hasn't put out his own bill on each one, he can explain why. For another thing, doctors tend to know each other's business methods in a city the size of Columbus. Moreover, a patient will talk to anyone about his operation—and how much it cost him.

"The surgeon who collected a bill and split it would have to show it in his income tax return—all as gross income—and then deduct half as business expense. To hide the split, he would have to declare as net income the half he gave to the referring physician as well as his own half. In that case, his expenses plus the tax on 100 percent would eat up the 50 percent he kept.

"Of course, if the surgeon wished to conceal his split income by leaving it out of the return, he then would merely be guilty of income tax evasion. The Collector of Internal Revenue is inclined to regard this as a penitentiary matter, so it did not appear to be a particularly good way of avoiding the society's fee-splitting hook.

" 'It is the intention of the society,' said Doctor N, 'to accumulate data and to seek prosecution of both the surgeon and the general practitioner. Both are equally an offender under Ohio's ancient no-split law, which provides for revocation of the fee-splitter's license to practice.'

"Whether or not the method of the Columbus Surgical Society is sound, the leaders' courage in facing the issue of fee-splitting and trying to do something about it is undeniably admirable. Its aim, to quote an old medical chestnut, is 'in the best interest of the patient.' "

Recently the May issue of the magazine *Your Life* came to my attention. This is a pocket-sized magazine with a national circulation. In bold letters the front cover called attention to an article entitled "Cancer Deaths—A Doctor Blames Doctors," which was written by Melvyn Berlind, M.D., a practicing physician in Florida and a Fellow of the AMA.

Here are the opening paragraphs of Dr. Berlind's article:

" 'I noticed a small lump in my left breast three weeks ago,' a patient told me. 'I immediately went to my doctor. He asked me whether it was painful, and when I told him it was not, he said, 'If it doesn't bother you, don't bother it.'

"That same afternoon I saw another patient who had been bleeding vaginally for a period of seven weeks. During this time her own doctor had not done a single vaginal examination—though he had given her about two dozen injections of sex hormones!

"Two days later I examined a woman with a mass in her lower abdomen. She told me that she had noticed it about ten days before. On visiting her doctor she was told that it was probably her womb (she had given birth three months previously), and was advised to go home and rest!

"Each one of these women might have had a cancer—*and did!* And, in each instance, the doctor failed to make a complete examination to determine the exact cause of the complaints. Unbelievable? Yes, it would be, had I not the sad proof at my fingertips."

In Pennsylvania we are trying to solve this problem with a double-barrelled attack. First, our Cancer Commission—in cooperation with the state health department and the Pennsylvania Division of the American Cancer Society—has studied the whole cancer problem and divided responsibility three ways. One of the most important projects assumed by the state society is that of professional education, which our cancer commission plans to carry on in various ways. This program is just getting started.

In addition, our Committee on Graduate Education is taking the top-flight teachers from our medical schools to rural areas. For five weeks in the spring and five weeks in the fall, we have arranged one full day per week of graduate instruction in six different centers. This totals 80 hours per year. At present 852 of our members are taking this course. Next year the number of centers will be increased to eight, and we expect an enrollment of over 1,000. Of course, this instruction is not limited to cancer; it covers many different subjects. It should, however, help those who attend to be better doctors.

I have taken a few examples of criticism against the profession, and I have attempted to outline briefly what some medical societies are doing about them. This, in my opinion, is progressive public relations in action.

I know as well as you do that the percentage of doctors to whom these criticisms apply is relatively small. But, like the one rotten apple in the bushel, they contaminate the entire profession, at least in the eyes of the public. Consequently, it is our job to raise the general level of performance as high as possible.

Resolutions condemning unsavory conduct will not suffice. Medical Societies must take vigorous action to clear their ranks of those who indulge in unethical or unscientific practices before we can expect real results from any public relations program. Unless this is done, most of the money spent on public relations will go down the proverbial rat hole.

The question of money leads me to the second item in the inventory necessary for successful public relations. "Can we afford a public relations program?" is a question often asked. Well, every medical society has a public relations program whether it knows it or not. If you don't realize you have a public relations program, it's probably a very expensive one in terms of prestige. Poor public relations doesn't cost much money, but it costs too many friends. Many organizations have learned to their sorrow that when they weren't spending any money on public relations it was too expensive.

The Philadelphia Blue Cross Plan won the national award for the best public relations program in the Blue Cross field for the year 1947. C. Robert Gruver, their public relations director, in answer to the question as to how much a public relations program will cost, said: "There's no pat answer, but generally 1 percent of income should be *at least* a good average figure—a point of departure." One percent for a megaphone, he calls it.

Medical societies—county, state, and national—are the public relations departments of the medical profession; consequently, when we apply the 1 percent formula to medical public relations, we must consider the total gross income of all physicians.

The gross income of the medical profession in Marion County has been conservatively estimated at $8,680,000 per year. Applying Mr. Gruver's 1 percent formula to that figure, we find that the amount to be spent on public relations by the physicians of this county totals $86,800.

Assuming that one-third of this amount should be used by national organizations (such as the AMA, the NPC, and the various specialty groups), one-third by the state society, and one-third by the county society, your local budget for public relations would total $28,933.

This may sound like big money to some of you—and it is. But remember that this figure represents only one-third of 1 percent of the profession's gross income.

Moreover, I'm not saying that you should spend that much money. What I am saying is this: If you apply the formula suggested as a minimum starting point by the public relations director of an organization which won the first award in a national contest in this field, you would spend *at least* that much money.

You will remember the slogan of the florist industry: "Say it with flowers." A test survey in 1945 showed that this valuable catch-phrase was not being used effectively by florists. Consequently, a campaign was undertaken to revive the slogan because—according to a report of the Society of American Florists—more than $2,000,000 had been spent originally to popularize it. That's a half million dollars a word. Good public relations can *and should* be administered with care and economy, but it doesn't come cheap.

The type of public relations program I am talking about is built upon a tripod. First, there must be positive and constructive policies; second, effective action; and third, adequate interpretation. If any one of these three legs is weak or missing, the public relations program will topple.

Although I tend to de-emphasize the importance of publicity in public relations, that doesn't mean

that publicity has no value whatever. It means only that we should not concentrate on publicity to the exclusion of other important aspects of public relations. Interpretation of our aims and objectives is essential and can be accomplished best by publicity, not only through newspapers but by the use of all accepted media—the radio, direct mail, motion pictures, exhibits and displays, speakers, perhaps even paid advertising.

A friend of mine was motoring through Texas last summer following an old farmer in a broken-down jalopy. Presently the old Texan slowed down and pulled to the right as though he were going to stop. Just as my friend stepped on the gas to pass, the other car made an abrupt left turn. When the cars were finally untangled, the jalopy could not be recognized. The old Texas farmer was unhurt but plenty angry. When he became noisy, my tourist friend reminded him that slowing down and pulling to the right did not indicate a left turn.

"Furthermore," he added, "you didn't even give me a signal."

"Signal, hell," the old farmer yelled as he pointed to the dirt road into which he had tried to turn, "Everybody knows I live right up there."

Well, of course, everybody doesn't know that he lives right up there just as everybody doesn't know what the medical profession is doing to solve the health problems of this nation. Consequently, we must tell them—not once but over and over and over again. There is no such thing as a short campaign of public relations—either it's ceaseless or it isn't public relations.

Your newspaper can be of great help in this program of education. But to utilize effectively your newspaper and other media of communication—the radio, the motion picture, the popular magazine—you must re-evaluate your notions about what is ethical and what is unethical in the field of publicity.

Think of the tremendous possibilities for improving public knowledge of things medical. Think of the opportunities for putting across your side of the story in the matter of emergency calls, for example.

I am not suggesting that you call your newspaper and report every time you tie up a cut finger. I am suggesting that you give proper publicity to newsworthy events in the medical life of your community.

You fellows deal daily with the most dramatic news there is—with life and death. It will take sound judgment and intelligent discrimination to decide just what is printable and what is not. But don't let the difficulty of the job cause you to abandon a realistic effort to let the public know about the outstanding job you are doing.

Practically everybody knows about Wrigley's chewing gum, yet this company spends millions of dollars in advertising. Why? William Wrigley himself gave the answer several years ago.

"In advertising," he said, "you are not addressing a stationary audience in an auditorium but rather a constantly changing audience in a parade. People die every day, new ones are born, and population is constantly shifting from one locality to another."

An essential feature of public relations, therefore, is constant interpretation of what you are planning to do, what you are doing, and what you have accomplished.

The weak point in most public relations programs, however, is not in the policy-making or in the interpretation but in the accomplishment. One nationally known public relations consultant has said that the trouble with the medical profession is that they are excellent resoluters and motion-passers but poor workers at putting their programs across. It is easy, he said, to pass motions galore with no more effort than a full-throated "aye"; but it is something else again to put ideas on wheels and push them through to completion.

Undoubtedly there is a measure of truth in this criticism; in fact, it can be applied not only to the medical profession but to the members of almost any voluntary organization. And there's a definite reason. Effective action and outstanding accomplishment cannot be attained by referring the complex problems confronting the profession today to committees, composed of busy practitioners of medicine who must sacrifice a part of their livelihood every day they spend working on the problem, unless such committees are provided with competent assistance to follow through the vast amount of detail which must be handled if concrete results are to be accomplished.

In the personnel of medical society committees we have a remarkable pooling of the best medical talent available. Through their expert services, generously contributed, effective solutions to important health problems can be achieved which would be impossible for employees alone or individual members working separately to approach. Our committees are the workshops in which basic policies are forged into concrete programs. Every member of the profession owes a debt of gratitude to the busy practitioners who bring to such committee endeavors a quality of service which could not be purchased at any price; but it is utterly unfair to expect that they can solve the important and complex problems referred to them without the assistance of paid employees.

Consequently, the third item needed for a good public relations program is qualified personnel. The best conceived and most adequately financed public relations program will fall short of its possibilities unless it becomes the direct responsibility of a qualified executive who can make decisions within the framework of established policy and speak with authority for the organization.

The fact that a man has had newspaper experience or has acquired an M.D. degree, or worked for a medical society is no assurance that he can do

a good public relations job although, everything else being equal, such a background is definitely helpful.

Aside from the cardinal personal requirements of all those engaged in positions of responsibility—such as honesty, reliability, and a due regard for ethical concepts—the public relations man should possess the qualities of discretion, adaptability, tact, poise, candor, and tolerance. He should be socially acceptable to all types of people and responsive to the ideas of others. He needs a sound foundation in psychology, history, sociology, and economics. A public relations executive should be generally familiar with broad historical trends and intimately acquainted with current cycles of business, politics, and popular opinion.

Like a reporter, a public relations man must collect facts and gather opinion. Like a scientist, he must analyze his findings and weigh them in the light of previously determined standards and experience. Like an engineer, he must chart a plan of action based upon such analyses. Like a business man, he must see that all phases of the program are synchronized in point of time and budgeted in point of cost. Like a salesman, he must be able to produce concrete results. Like a physician, he must maintain adequate records essential to a continuous evaluation of the progress being made.

Courage, as well as intellectual integrity, is required. A whitewash artist in this position is not only futile but dangerous. He must not be a "yes" man. The real value of a public relations executive may appear only when his judgment forces him to say "no." And too much emphasis cannot be placed upon the need for sound judgment in this field.

Granting the validity of these requirements, it follows that no one will qualify completely. This means that in larger organizations the public relations department is composed of men with specialized abilities working as a unit. In smaller organizations the answer is often found in the employment of outside counsel. That is not to infer, however, that outside counsel is not used by large organizations, because it frequently is.

Medical public relations personnel must have a deep and abiding respect for the nobility of the profession; but they must not be blinded to its imperfections. Since no man is perfect, no group of men can be perfect.

With the proper philosophy and approach to the problem at the policy-making level, with an adequate budget, and with qualified personnel, any medical society can do a good job of public relations. But remember always that public relations performs no miracles. It simply brings about logical results from logical action.

WANTED BY THE FBI

Hugo Bob Hubsch, with aliases Robert C. Glass, R. C. Harris, Hogo Hobsch, Louis S. Miller, is being sought by the Federal Bureau of Investigation. On November 7, 1945, a Federal Grand Jury at Jackson, Mississippi, returned an indictment charging this man with a violation of the National Stolen Property Act. He is charged with another violation of the National Stolen Property Act in a complaint filed with a U. S. Commissioner at Birmingham, Alabama, on June 7, 1948. This individual has defrauded numerous physicians and hospitals in Eastern and Southeastern sections of the United States during the past few months through the medium of fraudulent checks.

Investigation has revealed that Hubsch has a chronic kidney ailment and it has recently been ascertained that he has a large kidney stone in the right ureter about four inches below the kidney. This condition has caused local inflammation which, at varying intervals, results in almost unbearable pain. He has been advised that it would be necessary for him to undergo major surgery for the removal of the stone in the near future and until that surgery is performed he will need frequent, if not continuous, medical attention. This fugitive moves about rapidly in that section of the United States which is East of the Mississippi River and recently he has given numerous physicians and hospitals fraudulent checks in return for treatment, hospitalization, sedatives and narcotic prescriptions.

The following is a composite description of Hugo Bob Hubsch: Age, about 52, claims to have been born in Budapest, Hungary, November 4, 1895; height, about 5'6"; weight, 140 to 170 lbs.; hair, dark brown, graying; eyes, brown; build, medium; race, white; nationality, believed to be naturalized American; occupations, laborer, pharmacist; scars and marks, left arm partially paralyzed, needle scars on both arms, large scars above each hip resulting from kidney operations, shrapnel scars and two bullet scars on abdomen, bridge in upper front teeth; characteristics, long nose, stooped posture.

Anyone having information concerning the whereabouts of this fugitive should immediately notify the nearest office of the Federal Bureau of Investigation or your local law enforcement agency.

WHAT EVERY MEDICAL OFFICER SHOULD KNOW ABOUT THE ATOMIC BOMB*

IX. Essentials of Instrumentation

THE detection and measurement of high energy radiation depends on the proper use of suitably constructed instruments, since nature has not seen fit to provide man with senses capable of responding to it. Without instruments even intense radiation fields will not be recognized until irreparable damage has been done. If photographic film and a few special methods are excepted, all detecting devices are based on the ionization produced in gases by the incident radiation. When an ionizing agent enters a gas, it may act on a neutral atom or molecule with a force large enough to remove one or more electrons from the atom. It is most probable that two ions will be formed, and so it is customary to speak of the formation of *ion pairs*. The average energy loss per ion pair in air is about 33 electron volts.

If ions are formed in a gas subject to an electric field, they will move in opposite directions—the negative ions toward the positively charged anode and the positive ions toward the negatively charged cathode. The current flow will be extremely small, and special measuring devices are required to detect it. Because of the neutral attraction of oppositely charged particles, there is always a tendency for ions to recombine and form neutral atoms. The chance of recombination is greater the longer the time before the ions reach the electrodes. The fraction lost decreases with increasing voltage, and eventually all of the ions are collected so that there is no further increase in current. This condition is known as saturation and the maximum current is called the *saturation current*.

Instruments for measuring the amount of electric charge collected in an ionization chamber are known as electroscopes and electrometers. The *Lauritsen electroscope* is one of the most generally useful instruments for radiation measurements. The moving system is a quartz fiber about 5 microns in diameter, made capable of conducting with a thin metal coating and cemented to one arm of an L. Mutual repulsion causes the quartz fiber to deflect. Ions formed inside the case will neutralize the charge and the fiber will return toward its uncharged position. Another useful quartz fiber instrument is the pencil type electroscope, or *dosimeter*. This is essentially a Lauritsen electroscope modified so that the entire instrument is about the size of a large fountain pen. Instruments of this type are very useful for measuring integrated exposures. They can be made with a sensitivity such that 0.1 r. will produce about one-half of full scale deflection.

*The ninth and tenth of a series prepared by the special Projects Division, Office of The Surgeon General. Reprinted from The Bulletin of the U. S Army Medical Department, by permission of The Surgeon General, Department of the Army.

Ionization chamber instruments vary widely depending on the particular type of radiation to be detected. Short range radiation is admitted to the chamber through a suitable window. A thin mica or stretched nylon film about 0.0001 in. thick is satisfactory for alpha particles. If beta particles are to be measured, the windows need not be so thin. When a photon enters the ion chamber and is absorbed, high speed electrons are produced that travel through the gas in the chamber, producing ions until their kinetic energy is spent. For 0.2 Mev x-rays this requires a chamber about 20 cm. in diameter.

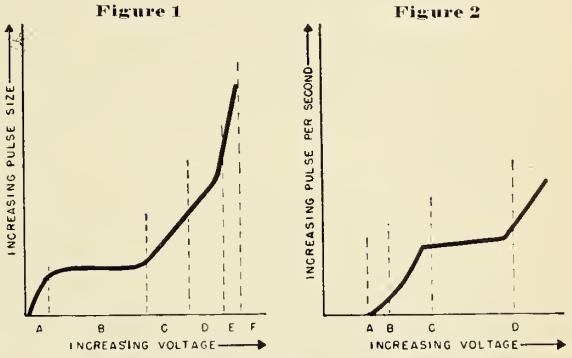


FIGURE 1. Ion chamber pulse size versus voltage.
FIGURE 2. G-M tube characteristics.

If the voltage is raised still further, the gas amplification factor will continue to increase, but in region D (Figure 1) the amplified pulses are no longer proportional to the number of primary ions. A sort of saturation effect begins to enter at this point, and, consequently, a few primary ions will produce nearly as many total ions as are obtained from a large number of primary ions. There is still some difference in final pulse sizes, however, so this region is known as the region of limited proportionality. The gas amplification continues to increase with further increases in voltage, and region D gradually changes to region E where all proportionality ceases. Here a single ion pair is sufficient to produce an amplified pulse of the same size as that obtained from a large number of primary ions. This is known as the *Geiger region* and is characterized by gas amplification factors of the order of 10^8. This is the portion of the tube characteristic commonly used for counting beta and gamma radiation. The Geiger region usually extends over a range of about 200 volts. When still higher voltages are used, the region of *continuous discharge*, F, is reached. In this region the tube is too unstable for useful operation, and care must always be taken to keep the tube voltages below the continuous discharge value. Actually the tube does

not go into continuous discharge, but, rather, produces a series of closely spaced pulses from one initial ionizing event.

A second type of characteristic curve is helpful in understanding the operation in the Geiger region. Assume the tube to be exposed to a constant radiation intensity, but with the incident particles or photons having unequal energies. Pulses per second when plotted against the applied voltage yield a curve similar to Figure 2. The associated electronic equipment for recording the number of pulses will not respond to the small pulses produced in the ionization chamber region where there is no gas amplification. Consequently, the curve will have a threshold, A, below which no pulses will be recorded. As the voltage is raised and the gas amplification becomes appreciable, the most energetic particles will be counted, but the weak ones will be lost. This is the region of proportional counting, AB. As the gas amplification continues to increase with voltage, more of the less energetic particles will be counted until point C is reached. Point C is the threshold of the Geiger region, CD, and here practically every particle entering the tube is counted. Point D is the threshold of the continuous discharge region.

Assume such a counter exposed to a constant amount of radiation, each ionizing particle or photon having the same energy. Each ionizing particle entering the chamber will produce a definite number of ion pairs in the gas, and these ions will proceed to the collecting electrodes where they will be neutralized and will produce a pulse of current in the external circuit. If, now, the size of the pulse is plotted against the voltage applied to the electrodes, a curve similar to that of Figure 1 will be obtained. Regions A and B represent the normal ionization chamber working conditions where the only ions contributing to the pulse are those produced by the original radiation. Over region C there is some gas amplification occurring very close to the central wire. In this region the gaseous amplification is quite stable for any given voltage and does not depend on the number of initial ions present. Thus, if the voltage is adjusted to a value such that the gas amplification factor is 1,000 and an incident beta particle produces 100 ion pairs, the pulse received at the electrode will be 10^5 ions. Under the same voltage conditions an alpha particle producing 10^5 primary ion pairs will yield a pulse of $10^5 \times 10^3$, or 10^8 ions. Because of the rather strict proportionality between the amounts of initial and total ionization, this portion of the curve is known as the *region of proportionality*, and a counting tube operating in this region is called a *proportional counter*. A proportional counter can be used to measure alpha particles or neutrons in the presence of strong beta and gamma radiation.

A small portable chamber should have the same absorption for x- and gamma rays as the air in the standard chamber and should also have the equivalent of the long air paths for the absorption of the high energy electrons. Chamber walls are regularly made of bakelite or plastics, both containing a high percent of carbon atoms. Since human tissue is composed chiefly of carbon, oxygen, nitrogen, and hydrogen, such an instrument will simulate absorption by the body. Ionization chambers designed on these considerations are known as *thimble chambers*. One successful thimble chamber instrument that is not entirely satisfactory for survey purposes is the *condenser gamma meter*. The chambers must be charged, left in the radiation field for an appropriate time, and then read with the meter. If a large contaminated area were to be surveyed, an enormous number of such chambers would be required. Such an area would require an instrument that would give a steady deflection proportional to the amount of radiation striking the chamber. Unfortunately, ionization currents are too small to be measured with portable meters, and it is necessary to use other means. It is perfectly feasible to measure currents of this order with suitable vacuum tube circuits.

Geiger-Müller (G-M) counters take advantage of the gas amplification that can be obtained when high accelerating voltages are applied to an ionization chamber. When an ion has an energy greater than the ionization energy of the gas molecule, it may produce secondary ions on collision. The secondary ions formed will in turn be accelerated by the electric field and may produce further ionization. This cumulative effect is known as *avalanche ionization*. If a total of A ion pairs results from one original pair, the process is said to have a gas amplification factor of A. In practice, A varies from about 10 in gas-filled photoelectric cells to 10^8 in some G-M counters. At a pressure of 10 cm. of mercury, gas amplification can be obtained at voltages of 250 to 1,500 volts depending on the gas and the tube dimensions. G-M counters usually have a cylindric cathode 1 to 10 cm. in diameter with a length 2 to 10 times the diameter. The anode consists typically of an insulated axial wire 0.001 to 0.005 in. in diameter.

The Geiger region is known as the *plateau*, and it is obviously desirable for a tube to have a long, flat plateau, since here the counting rate does not depend strongly on the applied voltage. To obtain desirable plateau characteristics the filling gas and pressure must be carefully chosen, and the central wire must be free from dust, sharp points, or die marks. Oxygen and water vapor are particularly undesirable and must be completely removed before filling. Argon is a very satisfactory gas and is used in practically all counters. Near the central wire a large number of electrons and positive ions will be formed in the avalanche. The electrons have a small mass and are already close to the central wire, so they will move toward it with high velocities and will be completely collected by the wire in 10^{-6} sec. or less. The positive ions, on the other hand, have to travel out to the negatively charged cylinder. Since they have comparatively large

masses, they move much more slowly than the electrons. The positive ion cloud will therefore reach the cylinder in about 10^{-3} sec.—long after the electrons have been collected at the wire. As a positive ion approaches very close to the cylinder, it will pull an electron from the cylinder and become a neutral molecule. In general, the electron will go into one of the upper energy levels so that the molecule, although neutral, will be in an excited state. The molecule will, however, promptly return to the ground state and in so doing will radiate a characteristic series of spectral lines. Some of these lines will be in the ultraviolet region of the spectrum and, consequently, will have sufficient energy to liberate photoelectrons from the metal cylinder. With high tube voltages a single photoelectron will be sufficient to start a second avalanche, and thus the entire process will be repeated over and over again.

It is possible, however, to construct counters in which the discharge can be stopped. These are known as *self-quenching* or fast counters. A self-quenching counter can be produced by adding to the usual filling gas a small amount of polyatomic vapor, such as alcohol or xylene. These complex molecules strongly absorb ultraviolet light, and by this mechanism the photoelectric omission at the cathode is prevented. Most of the polyatomic molecules introduced to make self-quenching counters are vapors at room temperature, and these counters are likely to show a sensitivity that changes with temperature. A further disadvantage lies in the fact that some of the quenching gas is dissociated at each discharge, and so these counters have a limited life. A very satisfactory self-quenching counter can be made by filling the tube with 10 percent alcohol and 90 percent argon to a total pressure of 10 cm. of mercury. With a non-self-quenching tube, an auxiliary circuit must be used to stop the discharge.

Any counter will give counts when placed in a neutron field, but better results can be obtained with specially designed tubes. To detect slow neutrons, the counter is filled with boron trifluoride, which is a gas at room temperature. A slow neutron may produce a nuclear reaction with the boron. This reaction liberates a considerable amount of energy, and the alpha particle and the recoiling lithium will have sufficient kinetic energy to produce heavy ionization that will trip the counter. By using the counter in the proportional range, it is possible to obtain a count for each disintegration even in the presence of large beta and gamma intensities. The capture probability decreases with the neutron velocity, so the reaction is not efficient for fast neutrons. Fast neutrons may be detected through the recoil atoms they produce when they collide with the gas atoms in the counter. The recoil atoms produce intense ionization, and, hence, if the counter is adjusted to the proportional range, the counter will discriminate against beta and gamma radiation. Fast neutron counters have a rather low efficiency because of the low cross section for the collision process. Neutron counting is complicated by the change in behavior with velocity, and the present neutron counters are far from satisfactory.

None of these devices gives an absolute measure of radiation intensities. It is, therefore, necessary to calibrate them in terms of known standards. This is not difficult if a gamma ray calibration is required in terms of roentgens. It has been established by careful measurements that 1 mg. of radium, in equilibrium with its products and inclosed in 0.5 mm. of platinum or its equivalent, will produce an intensity of 8.4 r. per hour at a distance of 1 cm. The inverse square law can be used to calculate the intensities at other distances. Standard x-ray sources, properly aged and carefully calibrated, are available from the National Bureau of Standards. Calibration of x-ray measuring instruments should be accomplished against primary standard ionization chambers or carefully calibrated secondary standards by a well-equipped laboratory such as the National Bureau of Standards or by a reliable instrument manufacturer.

TABLE I

Emulsion	Useful-sensitivity range (roentgens)
Type K	0.05- 2.0
Type A	1.0 - 10
Cine positive 5301	5 - 80
Cine positive fine grain 5302	40 -400
Kodalith 6567	70- 700
Kodabromide G-3	400- 8,000
548-0, double coat	2,000-10,000
548-0, single coat	5,000-20,000

In making alpha and beta particle measurements quite different considerations enter. Radioactive materials emit particles in all directions with equal probability, and, in general, a chamber or G-M tube will intercept only a fraction of the total emission. For example, if the active material is spread in a thin layer on the bottom of the chamber, only one-half of the ejected particles will reach the gas and produce ionization. It is then necessary to calibrate the chamber in terms of a known radioactive material. Various members of the naturally radioactive series are useful for this purpose. Photographic materials are also important tools for the measurement of radiation, since high speed particles and high energy photons produce developable images. Although photographic films and papers lack the accuracy attainable in the laboratory by electrical methods, they still play an important role in radiation measurements. A film is one of the simplest detectors of radiation, is small and light, can be obtained with a wide range of sensitivity, provides a permanent record of exposure, and has no complicated electronic circuits to get out of adjustment. For many applications these facts more than outweigh the disadvantages of film processing, the time required to obtain a measurement, and the variations inherent in photographic materials. Table I lists a series of emulsions that have proved useful for measuring beta

and gamma radiation. It can be seen that a single emulsion will cover an exposure range of about 1 to 10.

Photographic film meters are usually made into packets of dental film size (1.25 by 1.75 in.) and covered with an opaque wrapping to protect the film from visible light. Any combination of suitable emulsions can be put into a single packet. A cross of thin sheet lead about 1 mm. thick is attached to the packet. This absorber is sufficient to stop all beta particles so any darkening under the cross will be due to gamma rays. The cross also serves to enhance this darkening because of the larger number of electrons ejected from the lead. The regular wrapping is sufficiently thin to permit the penetration of all but low energy beta particles. Thus the film can be used to measure both beta and gamma exposures. In general, film processing is conducted in accordance with the manufacturers' recommendations, but variations may be used. Whatever procedure is used, it is most important to control time and temperature as accurately as possible. The developer should be in a tank surrounded by a constant temperature bath, and the films agitated throughout development. The importance of time and temperature control, scrupulous darkroom technique, and the use of fresh chemicals cannot be overemphasized.

Special emulsions are now available that are almost insensitive to visible light, and beta and gamma radiations, but will respond to heavy particles such as protons, deuterons, or alpha particles. These particles have such a low penetrating power that the emitting substance must be placed in direct contact with the emulsion. These emulsions are not used for personnel monitoring, but rather to detect alpha particle contamination. These emulsions will detect alpha particles in the presence of strong beta and gamma radiation, and under conditions that make the operation of electrical alpha particle detectors uncertain if not impossible. With weak exposures the plate will not be uniformly darkened and individual alpha particle tracks can be seen by using a microscope. Since alpha particles are emitted with an energy characteristic of the emitting nucleus, the track lengths may frequently be used to identify the alpha emitter. The various film emulsions can be used to make radio autographs of specimens containing radioactive materials. By exposing sections of the specimen it is possible to determine the cross-sectional distribution as well. The resolving power of photographic emulsions for determining the precise position is limited, and it is scarcely possible to determine the location of radioactivity to less than 1/100 mm.

X. Protection Against Atomic Bombs

Protection against atomic bombs may be divided into passive defense and active defense. The important effects of the atomic bomb against which protection must be developed are: (1) the blast or shock wave; (2) visible light, ultraviolet, and infrared radiations; (3) nuclear radiation; and (4) psychological effects.

Passive Defense and Protection

Blast. The effects of the atomic bomb rapidly decrease in intensity as one moves away from the point of detonation; thus, distance is always the best protection. Primary shock, or blast damage, is defined as the compressive and tearing action of the shock wave on the human body. When one interposes between the blast and the body an object of strength similar to that of an ordinary wall, this form of damage is effectively reduced. Primary shock is thus of importance only when a person is in the open, in which case he is exposed simultaneously to lethal amounts of other effects of the atomic bomb. Living things are remarkably resistant to blast damage and are much stronger in this respect than normal buildings. Underground shelters and normal reinforced concrete buildings protect against this effect very close to the point of detonation. Petechial hemorrhages of the lung occur from blast damage in its mildest forms. In its severest forms major abdominal hemorrhages appear.

Secondary shock, or blast damage, is caused by flying objects hitting and lacerating the body. A shock wave is very much like a wind of several hundred miles per hour, arising instantaneously, and lasting for about a second. This wind is strong enough to throw the body several feet. It also breaks windows, knocks down plaster, and throws other objects around with great violence. When these objects strike a person secondary shock damage results. There are many things a person can do for himself to reduce his chances of this type of injury if he has some advance warning of the detonation. He should keep away from windows and lie flat on the floor or ground. He should avoid standing under overhanging cornices, chimneys, and other heavy objects that are easily knocked down. Underground installations or shelters greatly reduce this effect, because very little of the air shock is transmitted through the ground and thence into shelters or basements. In Japan, this form of injury combined with burns accounted for most of the casualties. The rapid follow-up of the fire on the blast damage caused many deaths among the injured. Injuries of this type require evacuation and hospitalization. In the case of primary shock damage there is an amazingly small boundary zone. One is either killed immediately or is all right after a few minutes, so far as this effect is concerned. There is much that can be done in the design of vital installations to reduce damage from these secondary shock effects.

Flash burns are injuries created by direct exposure to the visible and near-visible radiation

emanating from the point of detonation. The thinnest type of nontransparent material will shield effectively from this effect. Light-colored clothing is particularly good as it reflects almost all this radiation. Dark clothing will not transmit this radiation but will catch fire and produce flame burns on the skin beneath the clothing. This form of damage is important only when a person is in the open and in direct line of sight with the point of detonation. Because of the nature of the atomic bomb, this form of damage occurs at greater distances than those caused by any other effect.

Flame burns are produced by fires started in inflammable materials or buildings. These were prevalent in Japan, but they would occur to a lesser degree in an American city. This possibility of fire and subsequent injury can be greatly reduced by making structures less inflammable. The development of large quantities of adequate fire-fighting equipment and trained personnel can furnish great protection. To reduce this form of damage it will be necessary to have fire-fighting equipment and personnel so located that a major proportion will not be wiped out by the detonation. Accounts from Hiroshima and Nagasaki point out the inadequacy of Japanese fire-fighting equipment and procedures. In both cities, about 90 percent of the equipment and personnel for these duties were wiped out immediately. Major efforts should be directed to reducing the possibility of flame burns, not only because they produce a large number of casualties, but also because these casualties need so many trained persons and so much equipment for treatment and hospitalization.

Nuclear Radiation. The use of nuclear radiation in warfare presents new problems for both the military and the civil population. These effects are not only important but complex, as they may be caused by external and internal radiations and may be immediate or delayed. For all nuclear radiation effects, distance is by far the best protection. Immediate radiation effects are produced in a matter of a few thousandths of a second after detonation. With the atomic bomb, about 99 percent of the nuclear radiation produced comes out in the first fraction of a second after the detonation. It consists of penetrating radiations that come from outside the body and therefore constitute an external hazard.

Large quantities of gamma rays are produced almost immediately by the detonation and radiate in all directions. These rays travel in a straight line as does light. They are highly penetrating, and it takes a large amount of material to absorb and stop them. It is important to realize the directional and shadow producing characteristics of this radiation. One does not need shielding on all sides but merely on the side of the detonation. In shielding against gamma radiation the important thing is the weight of the material that is between the body and the source. The chemical characteristics of the shield are of no importance. Lead is often used in laboratories where gamma radiation or x-radiation occurs. This is a suitable substance because it occupies a very small volume in comparison to its weight. The effectiveness of a shield is most often described by means of thickness of the material that is necessary to reduce the intensity to half the initial amount. This is called the half-thickness of that material. The approximate half-thickness of common construction materials are 1 in. for steel, 3 in. for concrete, and 4 in. for wood or earth.

Neutrons also constitute an external hazard at the time of the detonation. They are not as effective at great distances as the gamma rays, but they require consideration because, being uncharged particles, they are difficult to stop and shield against. Shielding is not as simple as in the case of gamma radiation, because the weight of the shielding material is not the important factor. Instead, the important characteristic is the ability of the particular element or compound to slow down and then capture neutrons. The neutrons that occur in the detonation of an atomic bomb are essentially fast neutrons. Substances such as cadmium and boron capture slow neutrons to an amazing degree; but, since these neutrons are not slow, these substances are of little value in defense against the atomic bomb. The best substances are those with low atomic weights. Hydrogen, the lightest of all substances, is the best; hence, in shielding against neutrons, the best substances for their weight are those containing large amounts of hydrogen, such as water or paraffin. The approximate half-thicknesses of common materials are between 3 in. and 12 in. for steel and about 6 in. for concrete, earth, wood, and water. Since neutrons, like gamma rays, travel in a straight line from the point of detonation, radiating in all directions, the shielding need be only between the person and the source.

Delayed Radiation. About 1 percent of the nuclear radiation produced by an atomic bomb is not produced immediately, but comes from the decay of the fission products. In an air burst, where the fireball and mushroom cloud containing the fission products go up in the air to be dispersed by the wind, this delayed radiation is negligible. In an underwater burst, or possibly a surface land burst, a base surge will probably occur. This cloud, moving close to the ground, contains a large proportion of the fission products. As this cloud sweeps out over ships or cities, it surrounds buildings, people, and equipment. The radiating material is then extremely close to a person. The relatively small amount of radiation that is left after the detonation is greatly enhanced because of its proximity. This base surge, in comparison to the mushroom cloud after the air burst, produces radiation intensities on the ground that are higher by many thousandfold. This is due solely to the fact that the base surge can surround individuals on the ground. When it is realized that at Bikini this base surge moved over an area of about 5 sq. mi., this is seen to be a very real hazard. It takes

time for this cloud to move, and, as the radiation from it is only of importance when it surrounds the point in consideration, there is available a varying amount of time in which to get out of the way or to dodge the cloud. This base surge moves with varying speeds. Initially it spreads out at about 50 m. p. h. Its speed constantly decreases until it is dispelled. For this cloud to spread over its maximum area requires several minutes. If one is in a city, great protection will be afforded if one gets down into a basement or sub-basement, or into an air-raid shelter. It is of importance also to note that this radiation from the base surge is nondirectional, as it comes from all points in the cloud. Hence, any shield that is devised must be on all sides, including the top, of the location considered.

Delayed gamma radiation from the base surge is similar to immediate gamma radiation, except in its nondirectional characteristics. The shielding requirements are similar to those in the previous situation, in that the same half-thicknesses are applicable. There are no delayed neutrons of significance; hence, special shielding is of no importance in this problem. In the delayed situation we also have important beta radiation. Immediate beta radiation occurs but does not travel a very great distance from the source, because of the efficient shielding furnished by air. Where the base surge is surrounding the location in question, beta radiation is important, because the half-thickness of air is about 4 yds. Normal clothing furnishes sufficient shielding to beta radiation. Similarly, thin walls and the glass in windows are adequate. It is, of course, nondirectional and comes from all sides. The extent of the external hazard furnished by beta radiation is not well understood. It is believed comparable to that of gamma radiation when a base surge has been created. Alpha radiation occurs from the nonfissioned plutonium and uranium. This radiation constitutes no external hazard, as the skin furnishes adequate shielding. All the alpha rays are absorbed in the epidermis with no resulting damage to living tissues.

Internal radiation gets into the body through inhalation, ingestion, or injection. This is a delayed hazard and is possible only where one is in the base surge, the mushroom cloud, or an area over which the base surge has previously passed. The internal hazard generally occurs only where there is also an external hazard. If one is exposed to the base surge or is in the mushroom cloud, the external radiation is often lethal without any consideration of an internal hazard. Particularly if one is working in a highly contaminated area after the detonation, there is a significant, but not necessarily lethal, degree of external hazard; but there is also a very great internal hazard. This is created by disturbing the dust and usually enters the body through inhalation. An additional hazard exists from eating with contaminated hands and thus getting the active material into the body through the mouth.

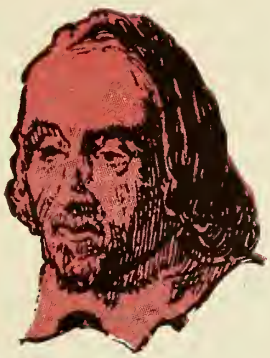
In the case of an atomic explosion, a small amount of this radioactive material is in the form of a true gas or vapor. Almost all of it exists on particles of dust or droplets of water. These contaminated particles have a size range of from 0.1 to 10 microns. The filter in a modern gas mask such as the assault mask is believed to give adequate protection. This filter is extremely efficient. It is quite possible that new masks will be devised that will protect against atomic, biologic, and chemical warfare. Such a development is highly desirable. Protective clothing would be required for workers entering contaminated areas. It would probably be permeable clothing. Its main requirement is that it should be disposable. Its functions would be to keep contaminated material from the skin and possible later entry into the body. Disposability is desirable, as these materials cannot be rendered harmless by any physical or chemical means.

Collective protectors with filters or inclosed air-conditioning systems are probably indicated for vital installations and underground shelters in anticipation of atomic warfare. Such items would prevent the highly contaminated air of the base surge from entering installations that otherwise would furnish adequate protection against the effects of the atomic bomb. The development of decontamination techniques and facilities is indicated to reduce the long-term possibility of personnel becoming contaminated and later having active material enter the body through the respiratory and digestive tracts. Such techniques will probably consist of washing away, carrying away, or burying the active material.

Education. In an attack on a modern city it is believed that about 50,000 deaths would result from a single bomb. It is felt that, if the individual civilian and soldier in such a city were adequately trained as to what he could do for himself after the detonation occurs, perhaps 10,000 lives could be saved. The development of atomic defense for the individual will be the subject of much work in the future. The education of large numbers of persons, both civilian and military, for special jobs in atomic warfare is important and will probably be given to such people as radiologic safety personnel, medical officers, civilian doctors, and civil defense technicians. The method by which the individual indoctrination and the specialized training is given will determine to a large extent the psychological preparation that will be attained in a population. It is highly desirable that we impart the proper degree of knowledge to all so that each individual has a respect for the special hazards of atomic warfare, thereby avoiding the undesirable extremes of excessive fear or ignorance. This will be a difficult job and the nation is far from attaining this goal at present.

A large amount of detailed defense planning will be required for the protection of the nation. It will include large-scale training of such specialists

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as fire fighters, evacuation control personnel, first-aid personnel, and decontamination groups. Large stock piles of food supplies, medical supplies, and disaster equipment will be required in relatively invulnerable locations. Preparations will be required for mutual aid between cities and major installations. All civil and military groups must be equipped and trained in the detection and isolation of contaminated areas. This new hazard created by nuclear radiation is the one hazard that may not be detected by any of the physical senses. It requires special instruments and special consideration. With sufficient indoctrination and a few minutes advance warning of an attack, it is quite possible that a 50 percent saving in casualties can be effected. This establishes the fact that development of advance detection techniques and warning signals is of the greatest importance to insure the continuation of our present existence.

Active Defense

Of less direct importance to the medical profession but of utmost importance to the nation is active defense, which means the prevention of an atomic attack. Regardless of our degree of preparation and protection, large numbers of casualties and a more important amount of disorganization and dislocation will occur. The attempts of the United Nations Organization to set up machinery to insure peace in the future, if successful, will be the greatest protection we can have against the atomic bomb. The basic responsibilities of military organizations require that they assume that war will occur.

Regardless of the political situation, the military organizations must constantly maintain the highest level of preparedness. In the case of atomic warfare this will consist of extensive stock-piling of all weapons, including atomic bombs. It will require readiness of retaliation forces. Because of the nature of the atomic bomb, it will require extensive protection of our ability to retaliate and conduct an offensive war. As was seen above, advance warning is most important—thus an efficient foreign intelligence corps is vital. Some persons have raised the provoking thought that, because of the capabilities of the atomic bomb, we shall lose an atomic war unless we attack first, assuming the enemy has atomic bombs.

A vital part of active defense that is erroneously played down in articles in the press is the assumed futility of interception of an atomic bomb carrier. Within the last few weeks our authorities on guided missiles have stated openly that it is their belief that guided missiles cannot be used to carry an atomic bomb for at least ten years. The military authorities must concentrate on the intervening years in which it is anticipated that a manned aircraft is the most likely vehicle. We have had only a fair degree of success in the interception of aircraft on bombing missions. There is no scientific reason why our degree of interception cannot be raised to nearly 100 percent if sufficient money, time, and technical ability are put on the problem. Atomic warfare presents a truly horrible outlook. It is our duty to push to the utmost any procedure that could possibly reduce its effectiveness against us.

FLIES AND POLIOMYELITIS

1. Efforts to abate poliomyelitis epidemics by intensive fly control have given little promise of success or of proving or disproving the proposition that flies are an important means of transmitting poliomyelitis. For the present, it does not appear justified for the Public Health Service or other public Health agencies to engage in *emergency* fly control activities during epidemics of poliomyelitis to learn more about the role of flies in the dissemination of this disease. More exact scientific investigations on this point are necessary.

2. The Service does not discourage fly control, rather it encourages such activity when done on a rational and continuing basis. The spectacular work by airplane and ground machines as has been carried on during emergencies, however, gives an unjustified feeling of security and diverts attention from other possible sources of poliomyelitis spread.

3. As a result of experimental work, the following facts are known concerning fly transmission of poliomyelitis:

a. Poliomyelitis virus can be found for considerable periods of time in the stools of infected persons and in sewage containing such stools.

b. Poliomyelitis virus has been isolated repeatedly from flies (house-flies and blow-flies) during epidemics.

c. The infection of experimental animals by the ingestion of materials containing poliomyelitis virus has been demonstrated on numerous occasions.

d. It has been shown once (not yet confirmed) that flies in the home of a case of poliomyelitis became contaminated naturally with poliomyelitis virus and conveyed enough of it to food which had no other contact with virus, so that poliomyelitis-free chimpanzees developed infections of poliomyelitis shortly after eating contaminated food.

The above indicates that flies *can* transmit poliomyelitis. It does not show how frequently this happens, it does not exclude other means of transmission, nor does it indicate how important fly transmission is in comparison with other means of transmission.

Experience is the Best Teacher

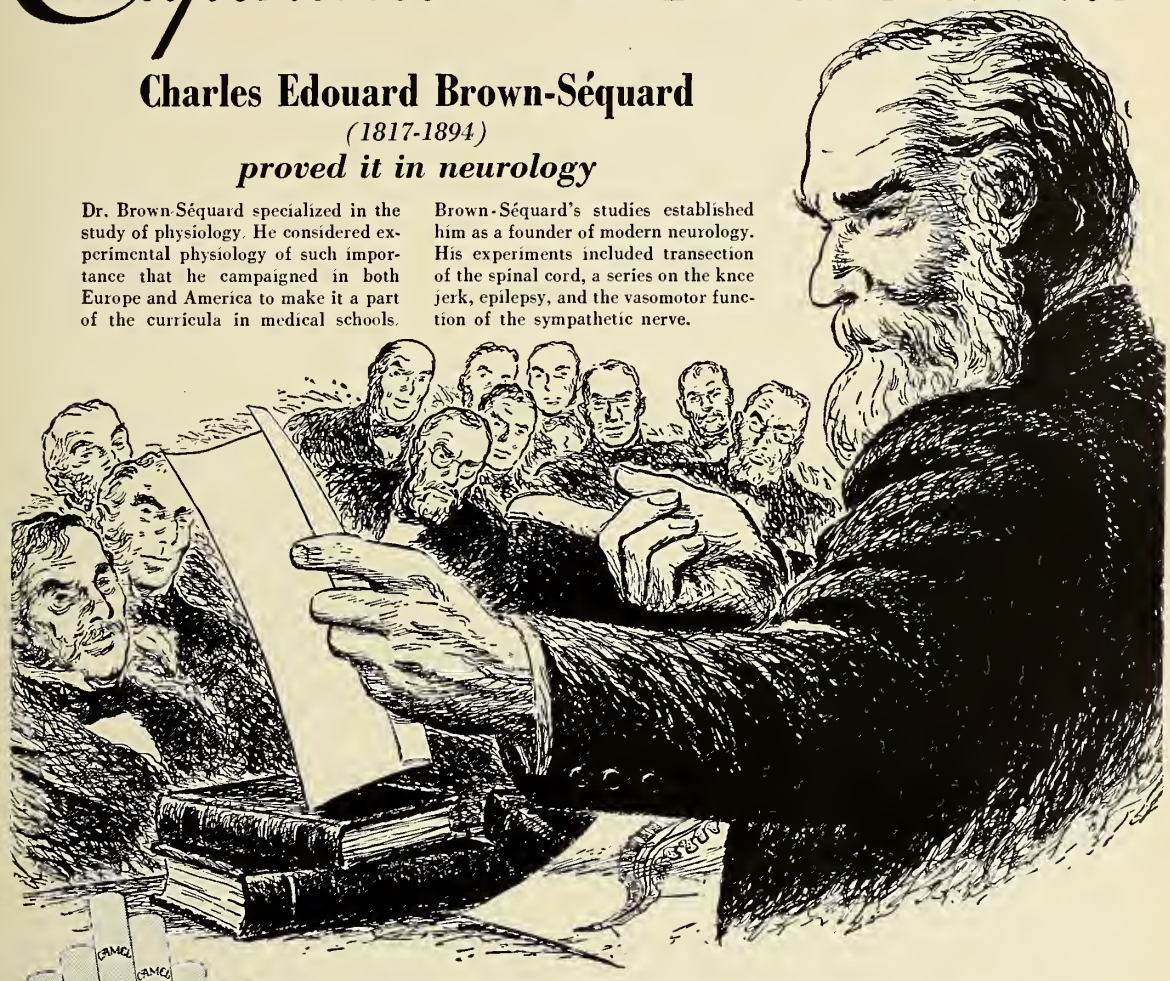
Charles Edouard Brown-Séquard

(1817-1894)

proved it in neurology

Dr. Brown-Séquard specialized in the study of physiology. He considered experimental physiology of such importance that he campaigned in both Europe and America to make it a part of the curricula in medical schools.

Brown-Séquard's studies established him as a founder of modern neurology. His experiments included transection of the spinal cord, a series on the knee jerk, epilepsy, and the vasomotor function of the sympathetic nerve.



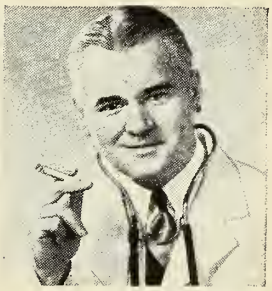


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Medical Panorama by the Associate Editor

NATIONAL HEALTH PROBLEMS—REPORT ON ACTIVITIES OF COMMITTEE ON LABOR AND PUBLIC WELFARE OF THE SENATE OF THE UNITED STATES

On June 17, 1948, Senator H. Alexander Smith, of New Jersey, Chairman of the Subcommittee on Health of the Senate Committee on Labor and Public Welfare, reported to the Senate in regard to the study which his committee had made on a total of 27 bills on proposed health legislation.

The two most important bills studied were the Taft bill and the Murray-Wagner-Dingell bill. Except for three bills which were passed by the Senate, and which were clearly within previously determined policies for the public health service, the other bills fell within the field covered by the two major proposals. The subcommittee therefore was concerned mainly with the issues which have been raised by these bills.

Senator Smith in his report outlined the fundamental issues underlying the consideration of health legislation as follows:

1. The question as to whether a serious national health problem actually exists is a debatable issue.

2. There is a fundamental question as to whether, and to what extent, it is necessary for the Federal Government further to expand its operations in the field of health.

3. In the event of further federal expansion in this field, there is a question of methods or systems to be employed.

4. It is further apparent that health legislation as a whole, enacted and proposed, must be considered in relation to other broad welfare programs of the government. The fundamental issue here is that of ascertaining the long-range effects of such proposals as compulsory health insurance and wide-scale grants-in-aid programs, assuming they were to be adopted and their resultant tax levies and regulatory requirements were added to those already existing.

5. There is a basic question as to the proper administrative organization for dealing with health functions.

6. Finally, it is a matter of fact, although frequently overlooked in testimony before the subcommittee, that health does not exist in a vacuum. Instead, health is the net result of the working of a very considerable range of environmental, personal, and other interrelated factors. Legislation providing medical care alone, for example, will not necessarily guarantee the prevalence of good health. Should there be also an extension of the present federal public health program?

The report also includes a summary of the result of a poll which the committee conducted among the state governors, who were provided with copies of the Taft bill and the Murray-Wagner-Dingell bill, and were asked to state their views and preferences. Of the forty replies received 25 favored the Taft bill, none favored the Murray bill, ten did not indicate a preference, and five were not in favor of either.

Senator Smith's remarks in regard to this poll were as follows: "This inquiry was neither designed nor intended as a full-blown survey of the problem and its results are obviously of limited application. Nevertheless, the broad implications of the governors' reports cannot be ignored; namely, that in general the state governments, which they represent, do not appear to be confronted with health problems sufficiently serious at this time to demand either wide-scale intervention by the Federal Government or the introduction of revolutionary methods for dealing with the problems that do exist."

The Committee on Labor and Public Welfare reported favorably on a resolution which provides for continuation of study by the Subcommittee on Health of the health problems of the nation, and directs that a report be made to the Senate not later than March 15, 1949.

Senator Smith's report is concluded by reproducing the conclusions and recommendations of the Brookings Institution report on medical care of the individual. The Brookings report was made after exhaustive research and study by the institution, upon the request of the Senate subcommittee. Its conclusions and recommendations were as follows:

CONCLUSIONS

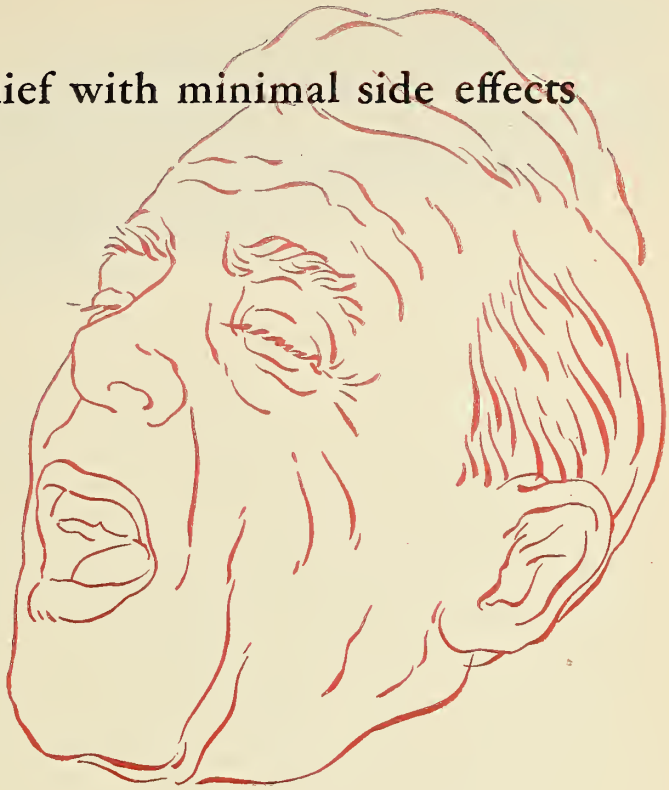
1. Probably no great nation in the world has among its white population better health than prevails in the United States. A few small homogeneous countries, such as New Zealand with respect to its white population, are slightly ahead of the United States as a whole, but certain States of the United States with larger populations equal them.

2. It is apparent that the United States under its voluntary system of medical care has made greater progress in the application of medical and sanitary science than any other country. This progress is now reflected in low mortality and morbidity rates of infectious diseases and in increased life expectancy. There is every reason to believe that these trends will continue unabated under our present system of medical care.

3. The nonwhites in the United States have materially poorer health than the whites, but the evidence does not indicate that this condition is primarily or even mainly due to inadequacy of medical care.

(Continued on page 944)

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in
hay fever

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1. ARBESMAN, C. E.: *N. Y. State Jl. of Med.*, 47: 1775, 1947.
2. LOVELESS, M. H.: *Am. Jl. of Med.*, 3: 296, 1947.
3. BERNSTEIN, ROSE and FEINBERG: *Ill. Med. Jl.*, 92: 2, 1947.
4. OSBORNE, JORDON and RAUSCH: *Arch. of Derm. & Syph.*, 55: 318, 1947.

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(Continued from page 942)

4. The advances in health among both the whites and the nonwhites that have been made in the United States in the past four decades do not suggest basic defects in the American System.

5. Although the statistics resulting from the administration of the Selective Service Act—the so-called draft statistics—have been widely used to show bad health among the American people and the need for revolutionary changes in arrangements for medical care of individuals, they are unreliable as a measure of the health of the Nation and cannot be used to show the extent of the medical needs of the country as a whole.

6. Present medical care in the United States compares favorably with that which existed in other leading nations prior to the Second World War.

7. The conditions in extremely poor rural areas that lack the resources to support adequate public services, such as health work, education, and highways cannot be satisfactorily solved by subsidies. This problem calls for a radically different approach, either bringing in new or improved economic activities or getting the people to more favorable and administratively less expensive areas. This condition has been accentuated by the emigration of youth from these areas to urban communities.

8. The United States has some individuals and families not possessed of the resources to enable them to pay for adequate medical care. In the future, as in the past, provision must be made for them through public funds or philanthropy. The evidence suggests that many of them are elderly, impaired, or underendowed or are widows or deserted women or their dependents. It is doubtful that they could be effectively covered by compulsory insurance because they would lack the means to attain and maintain an insured status. The large majority of American families have the resources to pay for adequate medical care if they elect to give it a high priority among the several objects of expenditure. The issue is not whether they can afford medical care but whether they should be compelled by law to pool their risks and to give payment for medical care a top priority. The major alternative for people with ability to pay is to leave them free to determine for themselves what medical care they desire and whether they will pool their risks through voluntary arrangements.

9. Compulsory health insurance would necessitate a high degree of governmental regulation and control over the personnel and the agencies engaged in providing medical care. This field of regulation and control would be far more difficult than any other large field previously entered by the Government, and past experience with governmental regulations and control in the United States causes doubt as to whether it encourages initiative and development.

10. The problem of eliminating politics from Government administration is extremely difficult. It does not seem probable that politics could be eliminated from Medical care supplied under a governmental system.

11. Compulsory insurance would inject the Government into the relationship between practitioner and patient. A real danger exists that Government actions would impair that relationship and hence the quality of medical care.

12. The administration of compulsory insurance would require thousands of Government employees for accounting, auditing, and inspection and investigation.

13. The cost of medical care presumably would increase because of (a) administrative expenses; (b) the tendency of insured persons to make unnecessary and often unreasonable demands upon the medical-care services; and (c) the tendency of some practitioners and agencies to use the system for their own financial advantage.

14. The adoption of compulsory insurance would not immediately make available adequate medical service for all, because there are not at present the facilities nor a sufficient number of trained and experienced physicians, dentists, and nurses to meet the demand which would result from compulsory insurance.

15. Proposals for compulsory insurance provide for payment of practitioners under one or all of three methods: (a) Fee for service, (b) per capita, or (c) salary. Use of the fee-for-service device represents the minimum degree of socialization, but it is administratively difficult. Administrative difficulties would probably result in the adoption of the per-capita system which represents a higher degree of socialization or even in the salary system which represents practically complete socialization. It seems questionable whether a country which once embarks on compulsory insurance can turn back but must attempt to remedy defects by more complete Government control and administration.

RECOMMENDATIONS

1. For the present, in our judgment, the National Government would be wise to leave to the individual States the question of whether compulsory health insurance is to be adopted or whether the provision of professional services is to be left in the realm of free enterprise. It seems highly probable that in many communities the intelligent cooperation of consumers and practitioners will develop satisfactory arrangements that remain subject to their own control without National Government administration. It seems highly improbable that this experimentation—possible under our Federal form of government—will ultimately develop a single pattern that is applicable to all sections of the country and is desired by a large majority of the people. If such a pattern should develop, it will doubtless then be adopted with a great degree of unanimity. If compulsory insurance snould be adopted now by a narrow vote in the Congress, large numbers of persons who are opposed to it would start with a hostile attitude toward the whole undertaking.

2. For the time being the National Government and many of the State governments may well devote their resources and energies to:

(a) Research and developments in the fields of public health.

(b) Health education at the school level.

(c) Teaching of preventive medicine.

(d) Assisting in the acquisition of physical facilities and training of personnel.

(e) Providing systematic care for the indigent and the medically indigent.

3. From the standpoint of public relations, governments might be well advised to leave adult educational campaigns for the control and prevention of disease to the national, State, and local voluntary organizations, which have been able to enlist the active cooperation of leading laymen in most sections of the country. It must be remembered that good health is not exclusively a matter of medical care; it also impinges upon causative factors that are nonmedical, such as food, shelter, vice and crime, transportation, and industry. Its maintenance depends also upon the intelligence, interest, and cooperation of individuals, families, and local communities.

These recommendations are not widely at variance with those of the majority of the Committee on the Costs of Medical Care, arrived at in 1932 after a comprehensive study. The report of the committee says:

"* * * (The) majority of the committee does not endorse the recommendation which would make health insurance a legal requirement for certain sections of the population. These members realize that such a step may ultimately be necessary and desirable in some States, but they believe that for most States and probably for almost all of them at the present time, it is much more desirable (a) to encourage voluntary measures for protection against wage loss during sickness, and (b) to develop voluntary insurance for medical care in conjunction with group practice, with hospital service and with the related measures recommended on the preceding pages. They are of the opinion that the difficulties of these plans can be controlled by a combination of professional

(Continued on page 946)

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and community effort, and that these plans hold the promise of steady extension in scope of service and in proportion of the population served. These members believe that the various payment plans (aside from compulsory insurance) if fully carried out, would: (1) Largely solve the problem of hospital costs which constitute about 50 percent of the average family expenditure for the care of sickness; (2) provide adequately for many rural areas in which serious deficiencies of facilities exist at present; (3) make more nearly adequate provision than exists at present for the indigent and for the care of certain diseases of public importance; and (4) provide, through voluntary cooperative insurance * * * medical service to a majority of the 70,000,000 people living in industrial communities and in cities."[1]

The years since 1932 have witnessed:

1. A great growth in voluntary insurance both for hospitalization and for medical services.

2. State experimentation with compulsory health insurance in Rhode Island and California.

3. A growing willingness on the part of practitioners to cooperate in the development of prepayment plans and other devices to enable patients who so desire to regularize their payments for medical care.

4. A profound change in the amount and distribution of the earnings of the American people. This change greatly reduces the number who cannot afford adequate medical care if they desire to purchase it.

[1] Medical Care for the American People, the final report of the Committee on the Costs of Medical Care, October 31, 1932, p. 130.

The experience of the United States since 1932 seems to have demonstrated the wisdom of these recommendations of the majority of the members of the Committee on the Costs of Medical Care. It would seem unwise at this time to substitute for these developments a system of compulsory health insurance by national law which would have the unfortunate tendency to freeze policies and eventually retard medical progress.

The import of these conclusions and recommendations to the work of the committee is apparent. Although the Brookings Institution has raised serious questions as to the necessity and practicability of governmental expansion in the field of medical and other health services by the imposition of a national, compulsory system, the Institution has outlined certain functional areas in which problems exist and which should receive full recognition in the course of the committee's consideration of the problem. The Brookings report fills a gap heretofore existing in the evidence available to the committee; it represents a concise and fundamental contribution which bears directly on the basic issues involved in the consideration of proposed health legislation.

NAVY'S NEW MEDICAL TRAINING PROGRAM

THE Surgeon General of the Navy has announced the expansion of the bureau's professional training program for reserve and regular medical officers to permit more Navy doctors to meet the requirements for certification by the various American Specialty Boards, and to encourage the young doctor to intern under the auspices of the Navy.

Graduates of Class A medical schools who have been accepted for internship by a hospital approved for such training by the Council on Medical Education and Hospitals of the A.M.A. may be commissioned as lieutenants (junior grade), MC, USNR, and permitted to continue their intern training. They will receive all the pay and allowance of the rank while so serving. After completing their internships, the medical officers must remain on active duty for a period of one year. If they meet the professional, physical and moral requirements, they will be given every encouragement to transfer to the regular Navy.

Interns who have completed the one year of obligated service, and who have transferred to the regular Navy, may be considered for residency training on a competitive basis with other officer personnel of the regular Medical Corps.

Resident physicians now in civilian hospitals, or those accepted for approved residency training, are eligible for commissions in the regular Navy. Those so commissioned will be assigned to duty, with full pay and allowances, in the hospital in which they are already a resident, or to which they have been accepted for residency training. Every attempt will be made to permit residents holding commissions in the regular Navy to complete their training in event of an emergency.

The Navy has at the present time 400 approved residencies and fellowships in the various specialties recognized by the American Specialty Boards in naval and civilian hospitals. This educational training involving the 400 residencies is divided into 2 programs.

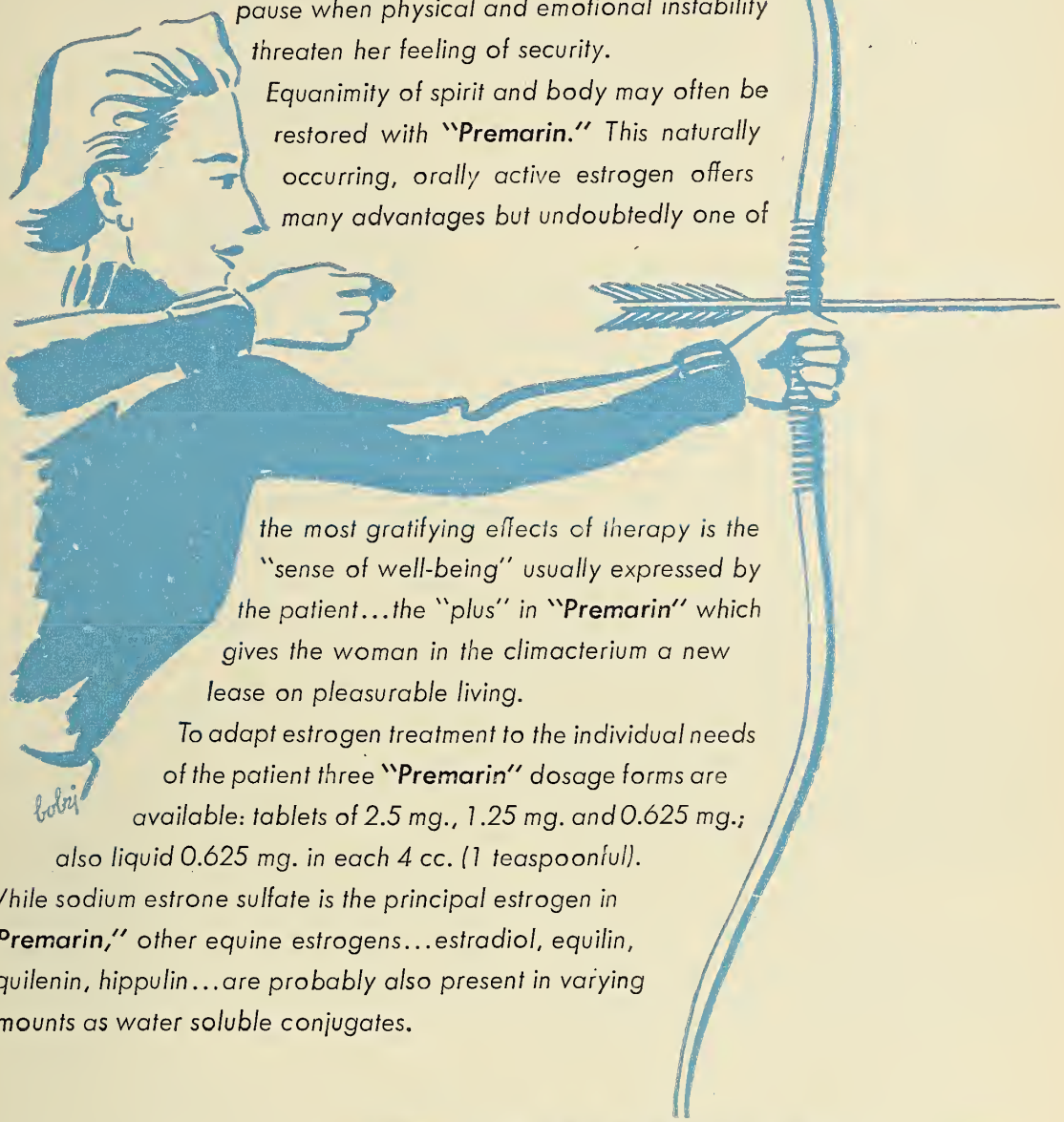
Program A: One hundred of the above-mentioned residencies, courses, and fellowships will be made available for civilian physicians accepting a commission in the U. S. Navy. An additional 100 civilian physicans will be commissioned in the U. S. Navy and permitted to pursue their own course, fellowship or residency, provided it is approved by the Council on Medical Education and Hospitals of the American Medical Association with concurrence of the Specialty Board. Upon acceptance of the designated training, they will be required to agree to remain in the Navy for a certain obligated time.

If on original appointment a candidate has not been approved for more than one year of training, during his first year of residency training (Program A) he may compete for one of the 300 residencies (Program B) available to the regular naval medical officers, and if he obtains such training he will obligate himself to remain on active duty for an additional period depending upon the amount of time spent in training.

Program B: Three hundred residencies, fellowships or courses, will be reserved for continuing the training program as presently organized for regular medical officers.

Information concerning any part of the program may be obtained by writing to the Chief of the Bureau of Medicine and Surgery, Navy Department, Washington 25, D. C.

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Perhaps, at no other time does a woman need reassurance so much as during the trying period of the menopause when physical and emotional instability threaten her feeling of security.

*Equanimity of spirit and body may often be restored with "**Premarin.**" This naturally occurring, orally active estrogen offers many advantages but undoubtedly one of the most gratifying effects of therapy is the "sense of well-being" usually expressed by the patient...the "plus" in "**Premarin**" which gives the woman in the climacterium a new lease on pleasurable living.*

*To adapt estrogen treatment to the individual needs of the patient three "**Premarin**" dosage forms are available: tablets of 2.5 mg., 1.25 mg. and 0.625 mg.; also liquid 0.625 mg. in each 4 cc. (1 teaspoonful).*

*While sodium estrone sulfate is the principal estrogen in "**Premarin,**" other equine estrogens...estradiol, equilin, equilenin, hippulin...are probably also present in varying amounts as water soluble conjugates.*

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What's Going On In Indiana by the Executive Secretary

PREVIEW OF THE 1948 ANNUAL SESSION

Machinery for arranging the 1948 annual session of the Indiana State Medical Association in Indianapolis, October 26, 27 and 28, is whirring along at top speed. Many of the committees are holding numerous meetings to complete the details for the ninety-ninth annual gathering of Indiana physicians. As the program proper will not appear in print until the October JOURNAL, we'll draw the curtain aside for a peek at the "1948 Convention Model."

Scientific Meetings. All scientific speakers this year will appear before general assemblies, on Wednesday and Thursday, October 27 and 28. Sections will not give scientific programs, but will meet briefly to elect officers and transact other business. Each section was given the privilege of selecting one speaker for the general program. Sixteen out-of-state men and eight Indiana physicians have accepted invitations to present papers. Two will speak on nonscientific subjects—Dr. Paul R. Hawley of Chicago, chief executive officer, Blue Cross-Blue Shield Commissions, and Dr. Ernest E. Irons of Chicago, president-elect of the American Medical Association, the principal speaker at the banquet Thursday night. Each individual physician will find plenty subjects of interest to him in this well-planned scientific program.

—ISMA—

Instructional Courses. The number of instructional classes has been increased from twenty-five to thirty this year to give the "students" a wider selection of subjects. The course will operate from 11 o'clock until 5 o'clock Tuesday, October 26, and physicians may attend as many as five classes. These classes provide physicians with down-to-earth, usable-every-day information. A schedule of subjects, together with registration blank, appears in this issue of THE JOURNAL. Physicians should send in their reservations immediately, for the classes are limited to thirty persons. A small registration fee is being charged to help defray expenses.

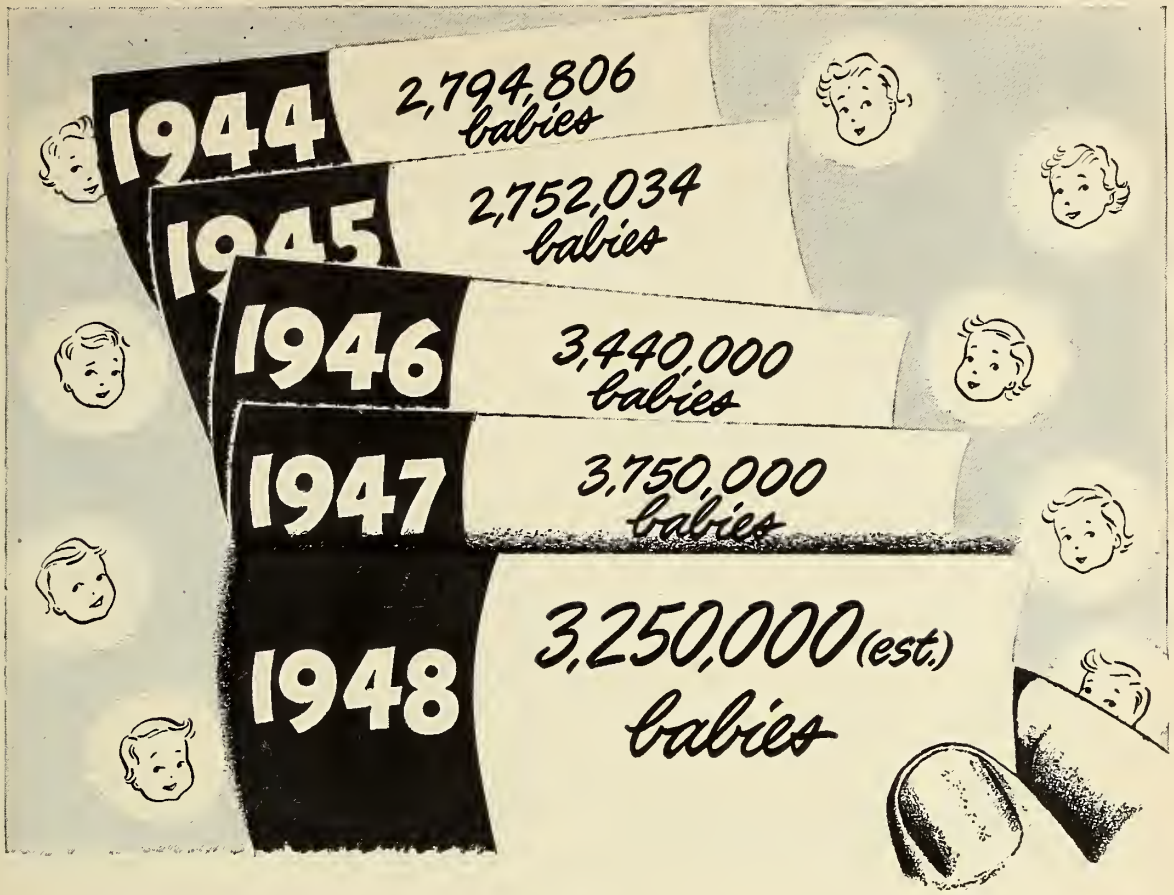
Exhibits. The Committee on Scientific Exhibits is making an effort to procure more educational material for display. These exhibits are believed to be as valuable as the scientific lectures. More scientific exhibits, and the largest number of technical exhibits in the association's history, will greet physicians. They should not be missed.

—ISMA—

Entertainment. The ever-popular buffet supper and smoker for men is on tap for Tuesday night. It will be the same grand party, except that Old Man Inflation has played havoc with the budget. For the first time it won't be free, but the cost per person will be nominal—$1.00 for food, refreshments and entertainment—the biggest dollar's worth in town. At 8:30 the men will join their wives and the women physicians, who will have a dinner of their own, in the Murat Temple for a free, two-hour professional entertainment. Earlier Tuesday golf players and trap- and skeet-shooters will vie for prizes. The Woman's Auxiliary will entertain the doctors' wives at tea at the Governor's Mansion Wednesday afternoon, and on Thursday a luncheon-bridge is scheduled. Filet of mignon and a humorist of national renown will make the annual banquet Thursday night very palatable. The dinner tickets will be $4.00.

—ISMA—

Miscellaneous. As far as the official program is concerned, Wednesday night will be open. It will afford opportunity for groups, such as specialty societies, committees, classes, fraternities, et cetera, to get together. If any group wishes notice of its meeting included in the official program, it should notify state association headquarters immediately. . . . Physicians who have not made hotel reservations should do so. List of hotels and reservation form are printed elsewhere in this journal.



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BIOLAC—a complete infant formula (only vitamin C supplementation needed) for infants deprived of mother's milk.

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ORDER YOUR TICKETS FOR THE 1948 INSTRUCTIONAL COURSE NOW!

The schedule of classes for the 1948 Instructional Courses, offered as a feature of the Annual Session of the Indiana State Medical Association, at Murat Temple, Indianapolis, is now complete. All classes are on Tuesday, October 26, 1948.

Admission to each class will be by ticket, and not more than thirty will be admitted to any class. The cost is $1.00 per class with a maximum charge of $3.00 for three or more classes. Plan your course to include five classes. (And please note second choices.) Enclose your check made payable to "Instructional Course Committee." Do it now!

INSTRUCTIONAL COURSE SCHEDULE

All Classes in the Egyptian Room—On Second Floor

Hour	*Room A*	*Room B*	*Room C*	*Room D*	*Room E*	*Room F*
11:00 A.M.	The Psychological Management of Patients Course 1	Dysfunctions of the Thyroid Gland Course 2	Diagnosis and Treatment of Common Skin Diseases Course 3	The Uses of Sulfa, Penicillin and Streptomycin Course 4	Pediatrics and The General Practitioner Course 5	Differential Diagnosis and Conservative Care of Backache Course 6
NOON RECESS						
1:00 P.M.	Bedside and Office Diagnosis of Cardiac and Vascular Problems Course 7	The Status and Care of Allergic Conditions Course 8	The Diagnostic Aid of X-Ray Course 9	Office Management of Ano-Rectal Conditions Course 10	Obstetrical Emergencies Course 11	Orthopedics for Use in General Practice Course 12
2:00 P.M.	The Differential Diagnosis and Treatment of Headache Course 13	The Management of The Menopause Syndrome Course 14	Bedside and Office Diagnosis of Cardiac and Vascular Problems Course 15	Office Diagnosis and Treatment of Common Genito-urinary Conditions Course 16	Infant Feeding Problems Course 17	Local and Short General Anesthesias in General Practice Course 18
3:00 P.M.	The Demonstration of a Physical Diagnostic Examination Course 19	The Problems of Hypertension Course 20	Impotence and Infertility Course 21	Diagnosis and Treatment of Common Skin Diseases Course 22	The Treatment of Colitis and Constipation Course 23	The Management of Diabetes Mellitus Course 24
4:00 P.M.	The Demonstration of a Diagnostic Neurological Examination Course 25	The Management of Problems of The Elderly Course 26	The Diagnosis and Management of Common Gynecological Conditions Course 27	The Diagnosis and Treatment of Common Eye Affections Course 28	The Problems in Management of Rheumatic Fever Course 29	Common Problems in Ear, Nose and Throat Conditions Course 30

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APPLICATION BLANK

Instructional Course Committee,
c/o Gordon W. Batman, M.D.,
723 Hume Mansur Building,
Indianapolis 4, Indiana.

Enclosed find check for $1:00; $2.00; $3.00. Please reserve tickets for the following Instructional Courses:

	11:00 A.M.	1:00 P.M.	2:00 P.M.	3:00 P.M.	4:00 P.M.
First choice	No.:	No.:	No.:	No.:	No.:
Second choice	No.:	No.:	No.:	No.:	No.:

(Insert Course Numbers plainly, please.)

Your tickets will be waiting for you at the Registration Desk, October 26, 1948.

Signed: ..... M.D.

Address: .....

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A REPORT —
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— for prepayment
of Surgical and
Obstetrical Care

The

Doctors' Plan

July 1946	Plan organized by committee of Indiana State Medical Association
First Certificates became effective	September 1, 1946
Total Membership first year	121,414
Total Number Claims paid first year	5,687
Total Amount Paid Members first year	$295,446.50
Guarantee Funds returned in full to doctors	February 1, 1948
Payments to members increased from $150 to $200 without increase of membership fees	April 1, 1948
MEMBERSHIP END OF SECOND YEAR	201,233
Total Number Claims paid during two years	18,236
Total amount paid members during two years	$935,806.00

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News Notes

Dr. Robert E. Moses recently announced the opening of an office in Worthington for the practice of medicine and surgery.

Dr. James C. Miller recently opened an office in Greensburg for the general practice of medicine and surgery. A graduate of Indiana University School of Medicine, Doctor Miller served his internship at St. Joseph Hospital in South Bend.

A graduate of Indiana University School of Medicine, Dr. Walter Lee Owens, formerly of Norman, has opened an office for the practice of medicine in Orleans. He interned at the Evangelical Deaconess Hospital, in Detroit.

Dr. Jean-Maurice Poitras, formerly of New York City, has entered the practice of medicine, surgery and obstetrics in Fort Wayne, as an associate of Dr. Doster Buckner, at 421 West Wayne Street. Doctor Poitras is a graduate of the Long Island College of Medicine, of Brooklyn, New York, and is a veteran of three years service with the Navy.

Dr. Warren H. Pike, Jr., has taken over the practice of the late Dr. Ralph W. Kraft, in Hobart. Doctor Pike recently returned from Japan, where he held the post of public health officer in Yamagata. He is a graduate of the University of Maryland at Baltimore, and served his internship at the Presbyterian Hospital in Chicago.

Dr. E. B. Mumford, of Indianapolis, recently had the honor of being made a member of the International Society of Orthopedic Surgery and Traumatology. The group, which has a membership of approximately sixty in the United States, will meet in Amsterdam in September.

Louis W. Nie, M.D., has opened an office in the Hume Mansur Building in Indianapolis for the practice of psychiatry.

As delegate of the American Psychiatric Association to the National Conference on Nomenclature of Diseases, Dr. Walter L. Bruetsch, of Indianapolis, attended the conference held June twenty-third in Chicago. He also acted as chairman of the section on laboratory studies at the annual meeting of the American Psychiatric Association in Washington, D.C., May seventeenth to twentieth.

Upon completion of his residency at the Methodist Hospital Dr. Robert D. Pickett now is associated with Drs. Rollin H. Moser and John A. McDonald in the practice of internal medicine in Indianapolis.

Dr. Weston A. Heinrich has become associated with Dr. J. H. McCool, in Evansville. Recently awarded the degree of Master of Science in Surgery at Minnesota University, Doctor Heinrich has just completed a three-year fellowship in surgery at the Mayo Clinic.

Dr. Warren C. Hastings has opened offices in the Wayne Pharmacal Building, in Fort Wayne, for the practice of neurosurgery. A graduate of the University of Michigan School of Medicine in 1939, Doctor Hastings served four years of internship and residency in general surgery and neurosurgery at the Cleveland University Hospitals. For the next two and one-half years, he served as an Army medical officer in the ETO. Since his release from service, in 1945, he has been instructor of neurosurgery at the University Hospital at Ann Arbor, Michigan.

Dr. W. E. Jenkinson, formerly of Mount Vernon, has located in Salisbury, Maryland, after having completed a residency in anesthesiology at Bellevue, New York.

Dr. Robert L. Haller, of Fort Wayne, has opened an office for the practice of medicine in Churubusco. He is a graduate of Indiana University School of Medicine, in 1945, and served his internship at the St. Joseph Hospital, in Fort Wayne. For two years he served as an army surgeon at the Veterans Hospital in Marion, where he specialized in internal medicine and neuropsychiatry. He was released from service in June of this year, with the rank of captain.

The following letter, which will be of interest to his friends throughout the state, has been received from Dr. Harold E. List:

"I am still serving the Navy and am being transferred to Key West, Florida. I enjoy reading THE JOURNAL, as it not only helps to keep abreast, but also serves to keep informed as to what one's medical friends are doing.

"I have just completed a 20 months' tour of duty in Alaska as District Medical Officer for the 17th Naval District, and am now on my way to Key West as Senior Medical Officer at the Naval Air Station.

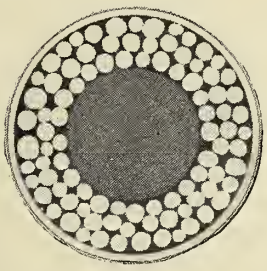
"Thanking you and with best regards to all, I am,

"Very sincerely,
"Captain Harold E. List (MC) USN
Naval Air Station
Key West, Florida."

Dr. C. L. Lippoldt, of Evansville, recently opened offices for the practice of medicine in Batesville. He graduated from St. Louis University School of Medicine in 1947, and interned at the Evangelical Deaconess Hospital in St. Louis.

THE *Coating* MAKES THE DIFFERENCE

The Barlow-Maney Enteric Coating* employs a rationale adapted from the physiology of digestion. Specially developed, unique, *in vitro* tests demonstrate its effectiveness—clinical radiography confirms it.
The coating of Barlow-Maney Tablets Aminophylline Enteric Coated is described in New and Nonofficial Remedies, 1946.



LABORATORY TEST

Fig. 1 — Tablet in stomach; only the outer sugar coating is affected.

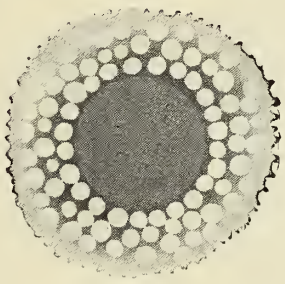


Fig. 2 — Tablet in duodenum. Liver bile plus increased alkalinity hastens emulsification of lipids of coating.

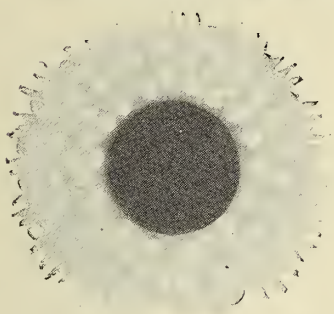


Fig. 3 — Complete disintegration.

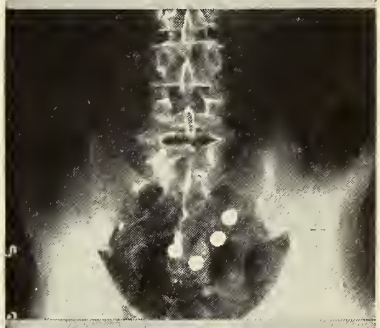
We direct your attention to AMINOPHYLLINE ENTERIC COATED B-M — valuable when the patient experiences gastric irritation from aminophylline.

*Coated under license from the State University of Iowa Research Foundation. U. S. Patent 2,373,763.

CLINICAL CONFIRMATION



Radiograph taken five minutes after intake of 6 tablets Enteric Coated B-M . . . all tablets are in stomach.



Four hours later . . . all tablets now in intestines.



Six hours later . . . all tablets disintegrated or in that process.

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Dr. Franklin A. Bryan, who has just completed a residency at the Indianapolis General Hospital, is now associated with the Veterans Administration Hospital in Marion.

After a twenty-seven months residency at Indianapolis General Hospital, Dr. Norval E. Green has opened an office in South Bend for the practice of urology.

The American Society of Anesthesiologists, Inc., approved an Indiana component society on July twelfth, when the following officers were appointed: Chairman, William H. Lane, M.D., South Bend; vice-chairman, Edward F. Bloemker, M.D., Indianapolis; secretary-treasurer, William B. Adams, M.D., Muncie; delegate, V. K. Stoelting, M.D., Indianapolis; alternate, Roy A. Geider, M.D., Indianapolis.

Dr. E. S. Niblack, of Terre Haute, has retired from the practice of medicine, and has moved to 136 North Woods Road, Manhasset, New York.

Dr. Stephen J. Alexander has opened an office in Crawfordsville for the practice of diseases and surgery of the eye. He is a graduate of the University of Cincinnati College of Medicine, in 1941. After serving his internship at the Miami Valley Hospital in Dayton, Doctor Alexander entered the Army Air Force Medical Corps, in July, 1942, and served for approximately forty-five months. Following his release from service, he became a member of the Staff of the University of Chicago Clinics, in the department of ophthalmology.

Formerly of Oak Park, Illinois, Dr. Glenn A. Bacon has opened an office for the practice of medicine in Fremont. He was a captain in the army for three years, having been released recently.

A native of Sullivan, Dr. Thomas C. Brown has opened an office for the general practice of medicine in Delphi. He is a graduate of Indiana University School of Medicine. He interned at Indianapolis General Hospital, and spent two years in the Navy, as physician with the Veterans Administration at Marion. Doctor Brown was released from duty in June of this year.

Dr. Francis M. Coy recently announced the opening of an office for the practice of obstetrics in Anderson. A graduate of the University of Louisville School of Medicine, in 1942, Doctor Coy practiced medicine for one year in Floyd County, Kentucky, prior to serving for thirty months as an army surgeon. Since his release from service, he spent one year at Louisville General Hospital, and fifteen months as resident physician at Murphy General Hospital, in Murphy, North Carolina.

Dr. Evart M. Beck has just completed thirty-eight months of postgraduate training at the Indiana University Medical Center and has opened an office in Indianapolis for the practice of internal medicine.

The former chief of professional services at the Cold Spring Road Veterans Administration Hospital in Indianapolis, Dr. Louis M. Sales has transferred to the Veterans Administration Hospital at Lake City, Florida, where he is chief of medical services.

The Council on Postgraduate Medical Education of the American College of Chest Physicians is sponsoring a postgraduate course in the latest developments in the specialty of Diseases of the Chest. The course will be of one week's duration and is open to all physicians. Tuition fee is $50.00, and registration is limited to fifty physicians. It will be held at Hotel Stevens, in Chicago, September 20-25, 1948. Reservations will be accepted in the order received. Applications for the course should be made through the Executive Offices, American College of Chest Physicians, 500 North Dearborn Street, Chicago 10, Illinois.

WARNING REGARDING CASTOR OIL LABELS

A warning that small bottles labeled Nasco Brand Castor Oil may contain turpentine was issued today by the Federal Security Agency's Food and Drug Administration. This product, packaged by the National Specialty Co., Nashville, Tennessee, may be in the hands of wholesale houses, druggists, grocers, variety stores, or consumers in 17 states in the central and southeastern section.

Consumers are urged to smell the contents of bottles labeled Nasco Brand Castor Oil before using them. If any mislabeled bottles of either castor oil or spirits of turpentine are found, please send them to the Food and Drug Administration, Washington 25, D.C., or call its nearest branch office.

WARNING REGARDING NEMBUTAL SUPPOSITORIES

The Abbott Laboratories, of North Chicago, Illinois, and the Federal Security Agency's Food and Drug Administration, today issued a joint warning that some Nembutal Suppositories manufactured before October 1947 contain from 40 to 223 percent of the labeled amount of Nembutal. Analyses by the firm and the Government show that most of the suppositories are of the declared strength, but variations caused by manufacturing difficulties which have now been corrected have been found in a number of different codes.

Any stocks of Nembutal Suppositories bearing the code Number 710 T 292 or any smaller code number should be returned to the Abbott Laboratories, North Chicago, Illinois. Suppositories with larger numbers or without the letter T in the code number are not being recalled.

for liver damage MEONINE®

(dl-methionine Wyeth)

IMPORTANT WYETH ADDITION TO

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Realizing that traditional management of severe liver disease has been on the whole disheartening, Wyeth has for years been conducting research on the essential amino acid most concerned with liver function . . . dl-methionine.

Product of this research is Meonine.

Meonine may be used to supplement the protein-rich diet usually prescribed whenever the liver has been damaged by malnutrition, alcoholism, pregnancy, allergy, or toxins. And it is clearly indicated if this diet cannot be taken. There is no evidence, however, that Meonine is more effective than foodstuffs such as casein and egg white which contain pure methionine.

In early stages of cirrhosis, clinical results with Meonine have been most encouraging. Complete directions for use and bibliography supplied on request.



Meonine supplied in 0.5 gram tablets, bottles of 100 and 1000. Crystalline Meonine—for preparing injection solutions—supplied in 50 gram bottles.

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After twenty-four months service in the Army Medical Corps and nineteen months of rotating internship at the Indianapolis General Hospital, Dr. Harold W. Shonk has opened an office in Noblesville for the practice of medicine.

Dr. J. A. Van Kirk has been joined by his son, Dr. Paul Van Kirk in the practice of medicine in Frankfort. He has recently been discharged from the Army, during which time he was in charge of a hospital section of a troop ship in the Pacific.

For the first time in fifty years St. Meinrad has a practicing physician. Dr. Charles W. Westerbeck, formerly of Los Angeles, has opened an office to serve St. Meinrad and the Abbey.

EXAMINATION FOR REGULAR CORPS OF U. S. PUBLIC HEALTH SERVICE

A competitive examination for appointment in the Regular Corps of the United States Public Health Service in the grade of assistant surgeon (first lieutenant) and senior assistant surgeon (captain) will be held in October. The written examination will be conducted October 4, 5, and 6, at places convenient to the candidates. The oral examination will be held at various points throughthe country.

All applicants must be at least 21 years of age and citizens of the United States, must present a diploma of graduation from a recognized medical school and satisfactorily pass a physical examination performed by Public Health Service officers. Physicians who began internship on July 1, 1948, will be admitted to the examination. Successful candidates will be placed on active duty in the Regular Corps upon completion of internship on July 1, 1949. Applicants for the grade of assistant surgeon must have had at least 7 years of educational and professional training or experience, exclusive of high school. Applicants for the grade of senior assistant surgeon must have had at least 10 years of educational and professional training or experience, exclusive of high school.

Entrance pay for an assistant surgeon with dependents is $5,011 a year, and for senior assistant surgeon with dependents $5,551 a year. This includes the additional pay of $1,200 for medical officers, as well as subsistence and rental allowance. Provisions are made for promotions at regular intervals up to and including the grade of senior surgeon (lieutenant colonel) and for selection for promotion to grade of medical director (colonel) at $9,751 a year. Retirement is authorized at either completion of 30 years' service or at the age of 64. Full medical care including disability retirement at three-fourths pay is provided.

Application forms may be obtained from Public Health Service Hospitals, District Offices or by writing to the Surgeon General, United States Public Health Service, Washington 25, D.C.

A native of Linton, Dr. Frank C. McDonald recently announced the opening of an office for the practice of medicine in New Castle. He spent three years in the Navy, in the Pacific theater. Doctor McDonald is a graduate of Indiana University School of Medicine, in 1942, and served his internship at the Methodist Hospital in Indianapolis. He also completed a residency in bone and joint surgery there.

PHYSICIANS INVITED TO CONFERENCE ON SCHOOL HEALTH PROGRAMS

A conference on school health programs for physicians and school administrators, sponsored by the Committee on School Health and Physical Education of the Indiana State Medical Association, will be held Wednesday, September 29, at the Claypool Hotel in Indianapolis. All physicians are invited.

Registration will be held from 9:00 until 9:45 a.m., after which the group will meet in the Riley Room for an explanation of the purpose and plan of the conference. Afterward those in attendance will divide into four discussion groups and will proceed to four "classrooms" where panels composed of a physician, a school administrator, a nurse and a teacher will lead in discussion of particular subjects. The four subjects are: "School Health Services," "Organization and Administration of the School Health Program," "The Physical Education Program and the Physician," and "The Physician in the Health and Physical Education Program in Rural Areas." Each group will discuss the subject for fifty minutes with the "experts."

Members of the sponsoring committee will serve on the panels. They are Drs. Francis P. Jones of Indianapolis; Joseph E. Tether, Jr., also of Indianapolis; Joseph H. Clevenger of Muncie, and B. N. Lingeman of Crawfordsville.

Luncheon will be served in the Riley Room at 12 o'clock. Dr. Walter L. Portteus, chairman of the committee, will serve as toastmaster, Honorable Ben H. Watt, state superintendent of public instruction, will speak on "Views of the State Superintendent on School Health Problems," and Dr. G. O. Larson of LaPorte, a member of the LaPorte city school board, will explain "The Health Program in the LaPorte City Schools." Luncheon tickets are $1.75, including gratuity. Physicians wishing reservations should notify the headquarters office of the state medical association.

The groups will meet in general assembly at 4 o'clock for a 30 minute summation before adjournment of the conference.

The office of the State Superintendent of Public Instruction and the Bureau of Health Education, State Board of Health, are cooperating with the committee from the state medical association in arranging the meeting, the first of its kind ever held.



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When conception is contra-indicated, patients need effective, non-irritating preparations . . . Physicians prescribing KOROMEX Cream and KOROMEX Jelly recognize the long clinical record . . . and ethical background of the time-tested Koromex formula . . . fastest spermatocidal time* . . . utilizing stable, fast acting phenylmercuric acetate . . . proper viscosity for cervical occlusion and elimination of vaginal leakage . . . pH consistent with that of the normal vagina, won't irritate delicate normal vaginal tissues.

ACTIVE INGREDIENTS: BORIC ACID 2.0%, OXYQUINOLIN BENZOATE 0.02% AND PHENYLMERCURIC ACETATE 0.02%, IN SUITABLE JELLY OR CREAM BASES.

Physicians' requests for the newest literature will be given prompt attention.

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WELLS COUNTY CLINICAL CONFERENCE

The second annual fall clinical conference sponsored by the Wells County Medical Society will be held in Bluffton Wednesday, September 15. The sessions will be held at the Bluffton Country Club.

Physicians are invited to attend. Dinner will be served at 6:30 p.m., and reservations should be sent to Dr. T. O. Dorrance, Caylor-Nickel Clinic, 303 So. Main Street, Bluffton, who is secretary of the society.

The program follows:

2:00 p.m.—"Toxemias of Pregnancy," Dr. Fred L. Adair, Chicago, Ill.

2:45 p.m.—"Poliomyelitis Problems," Dr. Archibald L. Hoyne, Chicago, Ill.

4:00 p.m.—"Inguinal Hernia Repair," Dr. Hamlin Mattson, Minneapolis, Minn.

4:45 p.m.—"Intestinal Obstruction," Dr. J. Arnold Bargen, Rochester, Minn.

6:30 p.m.—Dinner. Speaker: Dr. Fred B. Wishard, Anderson, Ind.

8:00 p.m.—"Dyspnea of Non-Cardiac Origin," Dr. James O. Ritchey, Indianapolis, Ind.

William J. Fitzgerald, M.D., has opened an office for the general practice of medicine at 1105 Prospect Street, Indianapolis. A graduate of the St. Louis University School of Medicine in 1939, Doctor Fitzgerald interned at Charity Hospital in New Orleans, and at the City Hospital, in Mobile, Alabama. Following this, he spent four and one-half years in the Army, serving in Alaska for about two and one-half years.

The 1948 Annual Session and Postgraduate Conference of the Michigan State Medical Society will be held in Detroit at the Book-Cadillac Hotel September 22-23-24. Among the 31 guest essayists are: F. H. Lahey, M.D., Boston, Waltman Walters, M.D., Rochester, Minnesota, R. W. TeLinde, M.D., Baltimore, Haven Emerson, M.D., New York, L. H. Dragstedt, M.D., Chicago, Alexander Brunschwig, M.D., New York, and S. P. Reimann, M.D., Philadelphia. For hotel accommodations, write E. C. Texter, M.D., Chairman of Housing Committee, 1005 Stroh Building, Detroit.

Indiana State Medical Association Trapshoot! 1948

Attention Doctors!!!!
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A luncheon at 12:00 noon Tuesday, October 26, 1948, Indiana Gun Club, at reasonable prices, starts the match.

Trapshoot at noon Tuesday, October 26, 1948, Indianapolis Gun Club—16-yard event and handicap (to be decided by your replies); also doubles, if desired.

An event for beginners or hunters only will be set up. Targets trapped at 3c each. Shells—all kinds of 12-gauge standard trap loads.

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Cash prizes, made available by the State Association.

INDIANA STATE MEDICAL ASSOCIATION
1948 — Trapshoot — 1948
October 26, at Noon

1. I desire to take part in the Trapshoot of the Indiana State Medical Association.
   I am contemplating the 16-yard event. (Yes) (No)
   The handicap event. (Yes) (No)
   The hunters' or beginners' special. (Yes) (No)
   Doubles. (Yes) (No)
2. Make reservations for luncheon (Yes) (No) for (1), (2), or ( ) @ $1.50 per meal.

Signed.....M.D.

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Deaths

Harry Boyd-Snee, who practiced for many years in South Bend, died on July fourth in Los Angeles where he went to live following retirement a few years ago. Doctor Boyd-Snee was seventy-eight years of age. He graduated from Rush Medical College, in Chicago, in 1889, and began the practice of medicine in South Bend in 1892. He was an honorary member of the St. Joseph County Medical Society and the Indiana State Medical Association, and was a member of the American Medical Association.

Antonio Giorgi, M.D., of Gary, died on July thirtieth at the age of eighty-five. Born and educated in Italy, Doctor Giorgi came to Gary in 1909 and had practiced there until last year, when illness forced him to retire. Doctor Giorgi was an honorary member of Lake County Medical Society and the Indiana State Medical Association, and was a member of the American Medical Association.

William B. Hunt, M.D., of Terre Haute, died recently at his home at the age of eighty-seven. He was a graduate of the Central College of Physicians and Surgeons, Indianapolis, in 1901. Doctor Hunt was an honorary member of the Vigo County Medical Society and the Indiana State Medical Association, and was a member of the American Medical Association.

Eden Thompson Riley, M.D., of Greensburg died on July third after more than half a century of medical practice. He was eighty years of age. Doctor Thompson graduated from the Medical College of Ohio, in Cincinnati, in 1895. At various times during his long career at Greensburg Doctor Thompson had been a member of the city board of health and had served as a county health officer. He was an honorary member of the Decatur County Medical Society and the Indiana State Medical Association, and was a member of the American Medical Association.

Horace R. Stauffer, M.D., of Nappanee, died July third at the age of ninety years. Doctor Stauffer graduated from Rush Medical College, Chicago, in 1883, and practiced in Nappanee until 1898, when he retired from the practice of medicine to enter business.

Rollin Robb Shannon, M.D., of Williamsport, was instantly killed on July fourteenth when his car struck a utility pole two miles west of Pence, Indiana. He was fourty-four years of age. A graduate of the Stanford University School of Medicine, in San Francisco, in 1933, Doctor Shannon had practiced in Milford, Utah, until approximately a year ago when he returned to his home in Williamsport to practice. In World War II he served as a major in the medical corps.

F. W. Tavenner, M.D., died July twenty-second at his home after a long illness. He was fifty-seven years of age. Doctor Tavenner was a graduate of the Indiana University School of Medicine in 1924 and had practiced in Gas City since that time. He had been a member of the plant staff of the Owens-Illinois Glass Company since 1933. A veteran of World War I, Doctor Tavenner participated in the International Olympics following that war. In addition he was an accomplished amateur artist. Doctor Tavenner was a member of the Grant County Medical Society, the Indiana State Medical Association, and the American Medical Association.

Samuel Charles Wagner, M.D., of Elkhart, died July twenty-seventh at the age of seventy-three. Dr. Wagner had graduated from the Medical College of Indiana, in Indianapolis, in 1903, and had practiced medicine for forty-five years, including time spent as a lieutenant in the Medical Corps in World War I. Doctor Wagner had served three terms as Elkhart county coroner, resigning last September because of poor health. He was a member of the Elkhart County Medical Society and the Indiana State Medical Association, and was a fellow of the American Medical Association.

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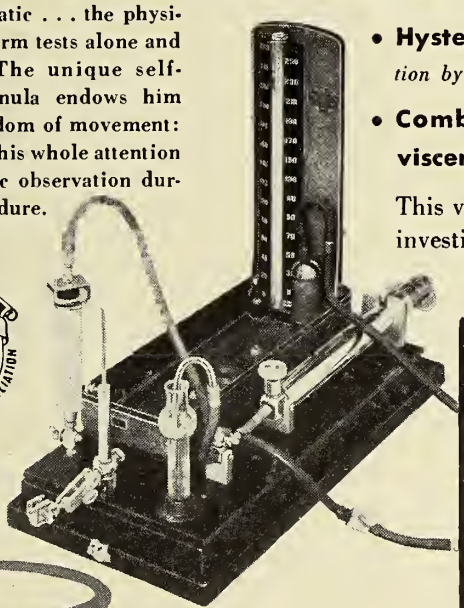
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Society Reports

INDIANA STATE MEDICAL ASSOCIATION THE COUNCIL

July 11, 1948

The Council of the Indiana State Medical Association convened for its summer meeting at 10:20 A.M., daylight saving time, Sunday, July 11, 1948, in the Harrison Room, Columbia Club, Indianapolis, with Dr. Alfred Ellison, chairman, presiding. Roll call showed the following present:

Councilors:

First District ---------- Not represented
Second District ---------- Not represented
Third District ---------- William H. Garner, New Albany
Fourth District ---------- George A. May, Madison
Fifth District ---------- A. M. Mitchell, Terre Haute
Sixth District ---------- W. U. Kennedy, Newcastle
Seventh District ---------- Cyrus J. Clark, Indianapolis
Eighth District ---------- E. H. Clauser, Muncie
Ninth District ---------- Wemple Dodds, Crawfordsville
Tenth District ---------- William H. Howard, Hammond
Eleventh District ---------- C. S. Black, Warren
Twelfth District ---------- Paul A. Garber, South Whitley
Thirteenth District ---------- Alfred Ellison, South Bend

Councilor-elect:

Second District ---------- William C. Reed, Bloomington

Officers:

Cleon A. Nafe, Indianapolis, president.
Augustus P. Hauss, New Albany, president-elect.
A. F. Weyerbacher, Indianapolis, treasurer.
Frank B. Ramsey, Indianapolis, associate editor of THE JOURNAL.
C. H. McCaskey, Indianapolis, chairman, Executive Committee.
Albert Stump, Indianapolis, attorney.
Ray E. Smith, Indianapolis, executive secretary.

Delegates to A.M.A.:

Homer G. Hamer, Indianapolis.
F. S. Crockett, LaFayette.
William M. Cockrum, Evansville.

Guests:

John D. VanNuys, Indianapolis, dean, Indiana University School of Medicine.
J. William Wright, Indianapolis, co-chairman, Legislative Committee.
Charles N. Combs, Terre Haute, chairman, Committee on Centennial Celebration and History.
Edgar F. Kiser, Indianapolis, vice-chairman, Committee on Centennial Celebration and History.
Herman M. Baker, Evansville, Chairman, Committee on Medical Education and Hospitals.
J. Neill Garber, Indianapolis, chairman, Committee on Public Relations.
Bert E. Ellis, Indianapolis, chairman, Committee on Convention Arrangements.
Don E. Wood, Indianapolis, vice-chairman, Committee on Heart Disease.
Charles F. Thompson, Indianapolis, chairman, Committee on Veterans Affairs and Rehabilitation.
Charles E. Gillespie, Seymour.

The chairman introduced Dr. George A. May, Madison, new councilor from the Fourth District, and Dr. William C. Reed, Bloomington, councilor-elect of the Second District.

On motion of Drs. Mitchell and Garber, the minutes of the April 4, 1948, meeting of the Council were approved as printed in the May, 1948, issue of THE JOURNAL.

Reports of Councilors

Reports were made on the spring district meetings, with additional comments as follows:

Dr. Kennedy, Sixth District: The District has had its annual meeting with a large attendance, an excellent program and generous hospitality by the Shelby Society. Officers were re-elected.

Wayne County has completed a nearly million dollar subscription for an additional wing at Reid Hospital.

Hancock County, under the forceful leadership of the County Society, voted an additional $200,000 for its new hospital.

Henry County has added a weekly clinical session at the County Hospital by its staff which has proved interesting and profitable.

Fayette-Franklin has continued its delightful dinner sessions with good attendances, good programs and a continued high interest.

Rush County has voted funds for its new hospital and plans have been prepared. The building is delayed by excessive construction costs.

Dr. Clark announced that the next meeting of the Seventh District will be held at Franklin on September 22. Details will be carried in the next issue of THE JOURNAL.

Dr. Howard reported that the fall meeting of the Tenth District will be held at Whiting on October 14.

Dr. Ellison said the nursing shortage in the hospitals in his district is still very acute. The Thirteenth District meeting will be held in South Bend on November 10.

Reports of Officers

Dr. Nafe, president, spoke on two matters:

(1) Request of the Committee on National Emergency Medical Service of the A.M.A. that the state association appoint a committee to work with the national committee in the event of disaster. The present state Committee on Veterans Affairs and Rehabilitation has been asked to assume that function and, as requested by Dr. Charles F. Thompson, chairman, three more members will be appointed to this committee if its activities increase.

(2) Meeting of state presidents, held prior to June A.M.A. meeting, with Council on Medical Service of the A.M.A., to get the attitude of the medical men to the proposal of the A.M.C.P. (Associated Medical Care Plans) that it set up a national insurance organization to assume the function of coverage of prepayment of medical care where it is not available and to supplement contracts that are not adequate. The consensus of

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1. Kasper, J. A. and Jeffrey, I. A.: A Simplified Benedict Test for Glycosuria, Amer. J. Clin. Pathology, *14*:117-21 (Nov.) 1944.

2. Haid, W. H.: The Use of Screening Tests in the Clinical Laboratory, J. Amer. Med. Tech., *8*:606-14 (Sept.) 1947.

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the meeting was that physicians are in favor of A.M.C.P. but that they would not approve of this organization becoming a potent group that would underwrite insurance coverage throughout the United States. It should act as a coordinating group—as a means of securing memberships on a national basis—redistributing these to Mutual Medical Insurance, Inc., and other companies, but it should not create a large insurance company on a national scale.

Dr. Weyerbacher, treasurer, reported that the Auditing Committee had held its annual meeting on July 7, 1948, and that its report shows that total investments of the association amount to $51,000.00, and the cash balance as of June 30, 1948, including all funds, is $55,601.95. Of course the cash balance will be materially reduced by the end of the year.

Dr. Weyerbacher called attention to the fact that the budget does not contemplate allowing any money for the salary of a field secretary, that so far no provision has been made to finance this project, and no limit has been set on the amount of salary to be paid.

Dr. Ramsey, associate editor of THE JOURNAL, reported that the August issue of THE JOURNAL would be the General Practice number and it would be a little larger than the average journal. "Everyone felt that we could have a little larger journal without running too far behind on costs. We are now in the midst of printing a series of articles on atomic explosions supplied by the United States Army Medical Corps, and we probably will be able to repay the Army for the courtesy of reprinting this material by getting reprints from our JOURNAL for them."

Unfinished Business

1. *Mutual Medical Insurance, Inc. W. U. Kennedy*, president: "Growth has been continuous but somewhat retarded by the necessity of Blue Cross to increase rates due to rapidly mounting hospital charges.

"The company has widened its coverage and in many instances increased fees. Its financial position continues very sound and promises wider coverage. Assumption of paying for special professional services is being done as rapidly as funds and experience permit with an announced goal of complete coverage of all medical care."

On motion of Dr. Kennedy, seconded by Dr. Garner, General Paul R. Hawley, chief executive officer, Blue Cross-Blue Shield Commissions, is to be invited to address the general meeting during the state convention, providing a place can be found in the program for him.

2. *Committee on Medical and Nursing School Scholarships. Dr. Clark*, chairman, reported that one more medical school scholarship had been awarded, bringing the total to six. He also reported that the Krannerts of Indianapolis had notified him that they will give another nursing school scholarship. After this scholarship is awarded the association will be sponsoring eleven girls in nurses' training, four through the Krannert fund, one through the Meyer fund, and six directly by the association.

3. *Hospital Standards Committee. Dr. Dodds*, chairman, said that his committee is working and will have a report for the next meeting of the Council.

4. *Report of Special Committee Appointed to Investigate the Matter of Improper Medical Testimony in Industrial Cases. Dr. Howard*, chairman.

"This committee is composed of Drs. Clauser and Garner, with me as chairman. We have given some thought to the problem involved, which briefly stated is this:

"What can the medical profession do to discourage the giving of false testimony in industrial cases?

"This evil assumes its worst form when a physician conspires with an attorney to build up the measure of damages by presenting exaggerated testimony of the percentage of disability resulting from industrial accidents or diseases.

"In Lake County the County Medical Council is a body to which transcripts of medical testimony may be submitted for their scrutiny and a report. This has been effectual in causing some cases built upon an entirely fictitious foundation to be dropped even before they came to trial; and also, we believe, in keeping the testimony within the honest judgment and knowledge of the expert witness. So, as chairman of this committee, I suggest that the following remedy be provided:

"(a) Either have a separate committee or use an existing standing committee as a group of physicians to whom either party to an industrial case may send a transcript of the medical testimony for examination, study and report.

"(b) Acquaint physicians and lawyers with the existence of this committee and encourage them to have accurate verbatim reports of testimony which can be transcribed for submission to the committee.

"(c) Instruct the committee to give any physician whose testimony is under scrutiny notice of that fact and opportunity to appear before the committee to justify his testimony.

"(d) Instruct the committee that when it has completed its hearing and study in any case it should make a written report, one copy of which should be given to the attorneys for each party in the case, and one copy of which would be sent to the Industrial Board.

"(e) Instruct the committee to have no hearings and make no study of the case until after the evidence has been introduced and the case finally decided, so that there can be no possibility of the activity of the committee ever being construed as activity intended to bias or prejudice the decision of the case, and such activity thereby be regarded as contempt of court."

Dr. Mitchell, in commenting upon the above report, suggested that Mr. Stump inquire as to

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whether or not a committee to cooperate with such a committee as recommended by Dr. Howard could be obtained from the Bar Association so that both the medical and the legal professions might cooperate in arriving at the truth in industrial cases as fully as possible. Mr. Stump said that he would look into this possibility and report. The report of Dr. Howard, together with the suggestion of Dr. Mitchell, was approved. Dr. Howard then suggested that someone be ready to submit this matter in the form of a report which would properly bring it before the House of Delegates. By common consent it was understood that that would be done.

On motion of Drs. Mitchell and Kennedy, this committee, composed of Drs. Howard, Clauser and Garner, is to be continued.

5. *Report of Committee on Public Relations. Dr. J. Neill Garber, chairman.* "Gentlemen, this report is brief.

"Item 1. The chairman of the Committee on Public Relations, in cooperation with Mr. Ray E. Smith, executive secretary of the state association, has been working on the publication of a news letter for the state association. Mr. Smith has done most of the work of preparation for publication of this news letter.

"A design for the letter form has been adopted and stationery is being printed in three colors. It it planned to print the news letter for one month with the red coloring and the next in blue and the third in green. These colors will be rotated as the publications appear.

"The first news letter will appear in August and will be mailed to a selected group of 500 doctors throughout the state for the next six months. This small group is necessary because the budget allowed the Committee on Public Relations is not sufficient to permit mailing it to a larger number at the present time. Furthermore, the reaction of this group will be carefully analyzed to see what the response of the entire group of doctors in the state might be to such a news letter.

"These first issues for the six months beginning August 1 are being mimeographed in the office of the state medical association. After the first of the year the joint office of the Blue Shield and the Blue Cross will have complete facilities for producing and mailing these letters at a reasonable cost.

"Item 2. The future activities of the Committee on Public Relations are contingent upon the following things: (a) the appointment of a field secretary; (b) readjustment of the budget for public relations activities; (c) the action of the Council upon recommendations which previously have been submitted by this committee."

6. *Report of Committee on Medical Education and Hospitals. Dr. Herman M. Baker*, chairman. "Your committee met this morning, with all of the members present, including Drs. C. J. Clark, O. O. Alexander, Harry P. Ross, Harry E. Klepinger, and E. H. Clauser.

"The committee gave a great deal of time to a discussion of the resolution passed by the last House of Delegates directing this committee to make a continued study of the problems of undergraduate medical education in Indiana. Dr. Van Nuys was with us today to clarify many of the questions that have arisen with regard to this problem. Dr. Van Nuys reported progress with regard to the problems of the medical school, particularly as it concerns the moving of the first year of medicine to the Indianapolis campus. We went into considerable detail in discussing the difficulties he has met with in the reorganization of his faculty.

"The committee again went on record as urging upon the Board of Trustees of Indiana University the moving of the first year of medicine to the Indianapolis campus. The committee feels very strongly about this and certainly that it is not possible to get well-balanced preclinical work at Bloomington, or is it possible for the school to obtain proper instructors and professors to handle this preclinical training because of the separation of the preclinical year from the main medical school campus.

"Quite a bit of time was given to a discussion of the possible dangers of federal subsidy to medical schools and the implication of this sort of thing.

"The committee considered the postgraduate educational situation both with regard to the problem at the medical school campus and in various centers out in the state. A long discussion was given to the project of this committee which was initiated at Evansville early this year which is giving monthly postgraduate courses under the joint auspices of the Vanderburgh County Medical Society, the Indiana State Medical Association, and Indiana University Medical School. The average attendance at these courses has been 157. Seventy-seven of these physicians were from outside of Evansville from the tri-state area surrounding. The cost per meeting was $128. There has been no registration fee or any other kind of a fee because this project was in the nature of an experiment. Courses have been given thus far in febrile diseases, traumatic surgery, obstetrics and gynecology, medical economics and public relations, and atomic medicine. The course has been set up through December of this year.

"The Council has set aside $600 for the use of this committee. It was anticipated that some of this money would be allotted to defray part of the expenses of the Vanderburgh County Medical Society in putting on this program. It is going to cost around $800 or $900 this year to put this project over."

On motion of Drs. Clark and Black, $400 of the $600 budgeted to the Committee on Medical Education and Hospitals is to be sent to the Vanderburgh County Medical Society to help defray the expenses of the postgraduate courses given at Evansville this year. It is to be understood that this is not to establish a precedent for future courses.

(Continued on page 970)

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THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

★ SEE PAGE 990 FOR CURRENT ADVERTISERS.

(Continued from page 968)

7. *Veterans' Affairs. Dr. Charles F. Thompson,* chairman of Committee on Veterans Affairs and Rehabilitation, reported that, in compliance with the request of the Executive Committee, his committee stands ready to act as a representative of the state association on questions which might arise in case of a national emergency and do any work that is to be done in addition to the routine veterans' affairs. He offered the suggestion that, in the event of a national emergency, his committee be enlarged in order that it will be more representative of all the districts in the state. At the present time the committee consists of only seven members.

8. *Nominations for Editorial Board.* The motion of Drs. Howard and Garber that the nominations be closed was passed. Those nominated at previous meetings of the Council and to be voted on at the October meeting of the Council are:

A. W. Cavins, Terre Haute (obstetrics and gynecology).

Raymond F. Carmody, Gary (ophthalmology and otolaryngology).

E. L. Cartwright, Fort Wayne (proctology).

9. *Field Secretary.* Dr. McCaskey reported that four men had been interviewed for this position but that his committee should know what the Council is going to budget to pay this man before it proceeds any further.

Dr. Black's motion that "we make an allowance on a basis of $6,000 a year for six months only" was seconded by Dr. Kennedy and passed.

10. *Alternate Councilors.* On motion of Dr. Howard this matter was deferred until the next meeting of the Council.

1948 Annual Session at Indianapolis

Dr. Bert Ellis, chairman of the Convention Arrangements Committee, reported that his committee has been active and that most of the arrangements have been made for the October convention. It was taken by consent that the amount to be charged for the stag party (anything up to $2.00) be left to the decision of the Convention Arrangements Committee.

Legislative Matters

Dr. J. William Wright, co-chairman of the Committee on Public Policy and Legislation, spoke briefly on national and local legislative matters.

New Business

1. *Certification of honorary members.* On motion of Drs. Mitchell and Garber, the Council accepted for honorary membership in the state association two members who recently have become eligible to this classification.

2. *Indiana Heart Foundation. Dr. Don Wood,* trustee of the Indiana Heart Foundation, and vice-chairman of the Committee on Heart Disease of the state medical association, asked permission of the Council for the Indiana Heart Foundation to sponsor a meeting to be held sometime during the annual session of the state association at which a well-known speaker will appear at the expense of the Heart Foundation. "The Indiana Heart Foundation is very desirous that the Indiana State Medical Association have control of the organization. A campaign is under way to get all the doctors in the state to be members of this organization. So, at the next state medical meeting this group would like to have the permission of the state medical association for a little recognition of this group and what it is trying to do."

Dr. Clark moved "that if satisfactory plans can be made with the local Committee on Convention Arrangements, the Council go on record as approving a meeting, to be held on Wednesday night during the annual session of the state medical association, to be sponsored and financed by the Indiana Heart Foundation." This motion was seconded by Dr. Kennedy, and passed.

3. *Committee on Centennial Celebration and History.* Dr. Charles N. Combs, chairman, and Dr. Edgar F. Kiser, vice-chairman, reported on the activities of their committee. Dr. Combs presented the table of contents of the book which is to be published commemorating one hundred years of medicine in Indiana. He said that all of the manuscript is ready for the printers—about 175,000 words—and asked the advice of the Council on how many copies should be printed, how they should be distributed, and what the charge per copy should be.

Dr. Howard moved that a blank to be used in ordering a copy of this book be inserted in THE JOURNAL, that the price be $2.00 per copy, and that a check must accompany each order. Motion seconded by Dr. Clark, and passed.

Dr. Combs outlined briefly the schedule of events planned for the centennial celebration.

Dr. Kiser spoke of the committee's suggestion that an "all-Indiana" program be arranged for the meeting, that is, all speakers to be Hoosier born or Hoosier educated.

It was taken by consent that the Centennial Committee should present their suggested plans to the next meeting of the Council, at which time action is to be taken regarding funds to finance the centennial celebration.

Dr. Hauss requested permission of the Council to appoint his committees at this time to make arrangements for the 1949 Centennial Meeting, and asked that he be permitted to add members from other parts of the state to the Indianapolis Committee on Convention Arrangements.

On motion of Drs. Clark and Mitchell, the request was granted.

4. *A.M.A. Meeting, Chicago, June 21-25, 1948.* Dr. William M. Cockrum, delegate, read a report on the A.M.A. meeting held in Chicago on June 21-25, 1948. This report will be published in THE JOURNAL.

5. *School Health Conference.* In the absence of Dr. W. L. Portteus, chairman of the Committee on School Health and Physical Education, the execu-

(Continued on page 972)

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GYNECOLOGY—Intensive Course, Two Weeks, Starting October 11. Vaginal Approach to Pelvic Surgery, One Week, Starting October 25.
OBSTETRICS—Intensive Course, Two Weeks, Starting October 25.
UROLOGY—Intensive Course, Two Weeks, Starting September 27.
MEDICINE—Intensive Course, Two Weeks, Starting October 11. Personal Course in Gastroscopy, Two Weeks, Starting September 27, November 8. Gastroenterology, Two Weeks, Starting October 25. Hematology, One Week, Starting October 4.
DERMATOLOGY—Formal Course, Two Weeks, Starting October 4. Clinical Course Every Two Weeks.
OPHTHALMOLOGY—Intensive Course, Two Weeks, Starting September 20. Refraction Methods, Four Weeks, Starting October 11. Ocular Fundus Diseases, One Week, Starting November 15.
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(Continued from page 970)

tive secretary announced that a Conference on the School Health Program for Physicians and School Administrators will be held at the Claypool Hotel, Indianapolis, on Wednesday, September 29.

6. *Matters referred to Council by Executive Committee.* Dr. McCaskey, chairman, presented the following matters:

(1) *Letter to be sent out by Indiana Cancer Society.* On recommendation of the Executive Committee, and on motion of Drs. Kennedy and Garber, the Council approved this letter with the suggestion that it be sent to all those listed except the hospital superintendents.

(2) *Indiana headquarters at A.M.A. meetings.* On motion of Drs. Howard and May, the Council approved the establishment of a headquarters for the Indiana delegation to the A.M.A. at future A.M.A. meetings.

(3) *Payment of A.M.A. delegates' expenses.* On motion of Drs. Garber and Kennedy, the Council adopted the motion passed by the Executive Committee at its June 13, 1948, meeting, which is as follows:

"On motion of Drs. Portteus and Ellison, the Executive Committee voted to recommend to the Council that beginning in 1949 the delegates from Indiana to the A.M.A. House of Delegates be paid their railroad fare, including Pullman, plus $10.00 per diem."

7. *Indiana Roentgen Society resolution.* On motion of Drs. Mitchell and Garber, the Council approved the following resolution which was unanimously adopted by the Indiana Roentgen Society on May 2, 1948:

"*Be It Resolved,* That the Indiana Roentgen Society heartily disapproves of the purchase or rental of radiation therapy equipment by the Indiana Cancer Society or any other organization for general use of members of a County Medical Society. It has come to the attention of the Executive Committee of the Indiana Roentgen Society that radium has been purchased for use by members of a County Medical Society and this we believe is inimical to the best interests of cancer patients, and that this type of therapy should only be given by individuals properly trained in this field;

"*Be It Further Resolved,* That a copy of this resolution be sent to the Council of the Indiana State Medical Association, to the Indiana Cancer Society, and to secretaries of the component county medical societies of the Indiana State Medical Association."

8. *Automobile insurance company proposal.* Dr. Charles E. Gillespie, Seymour, presented his plan for organizing an automobile insurance company, with coverage limited to physicians and dentists, in which the agent's commission would be eliminated, thereby effecting a saving of approximately 20 percent. The amount thus accumulated would be placed in a fund to build a state association headquarters building.

Following discussion by Mr Stump, Dr. Clark moved that a committee be appointed to study this matter further. This motion was seconded by Dr. Mitchell, and passed. The chairman appointed Drs. Howard, chairman, Garner and May to act as a committee to investigate this matter and report to the Council at its next meeting.

9. *Secretaries conference.* Dr. Hauss stated that following a discussion of the 1948 Secretaries' Conference at a recent meeting of the Executive Committee, the chairman, Dr. McCaskey, requested him to study and present some recommendations on the advisability of changing the annual mid-winter Secretaries' Conference into an interim session of the State Association.

Dr. Hauss stated: "The discussion came up at the Executive Committee meeting when a bill was presented for $225.00 for the traveling expenses of one of our Indiana Congressmen who spoke for about fifteen minutes during the last Secretaries' Conference." He stated that the committee felt that this bill was exorbitant and that something should be done to control the expenses of the Secretaries' Conference and also to increase the attendance at the meeting each year.

"The idea of changing the annual Secretaries' Conference into an interim session of the state association should be considered from several angles:

"1. There was poor attendance at this year's conference. There seems to be a lack of interest, and we are having less attendance at these meetings now than we had during the war or before it. We should get our county medical officers more interested in medical economics and more familiar with the actual workings and problems of our state association. I believe we should do everything possible to get not only the secretaries, but all the officers of the county societies to attend these meetings, including each county's delegates and alternate members of the House of Delegates. If we can get a big majority of these key men of our county units to meet with the officers and committeemen of our state association, we will have a great interim session, and all will go back home better informed and more qualified to guide the activities of their county societies. Although a general invitation is extended to all members to attend our annual Secretaries' Conference, it is the general impression that it is for secretaries only. The name of the conference implies this, and the free meal that the state association provides for 'secretaries only' has a tendency to discourage the other county officers and members from attending.

"2. *Cost of an interim session.* A largely attended interim session of one or two days need not cost as much as our present one-day Secretaries' Conference. The free meal for the secretaries should be discontinued and each county society should be requested to pay the expenses for their officers, delegates and alternates who attend the

(Continued on page 974)



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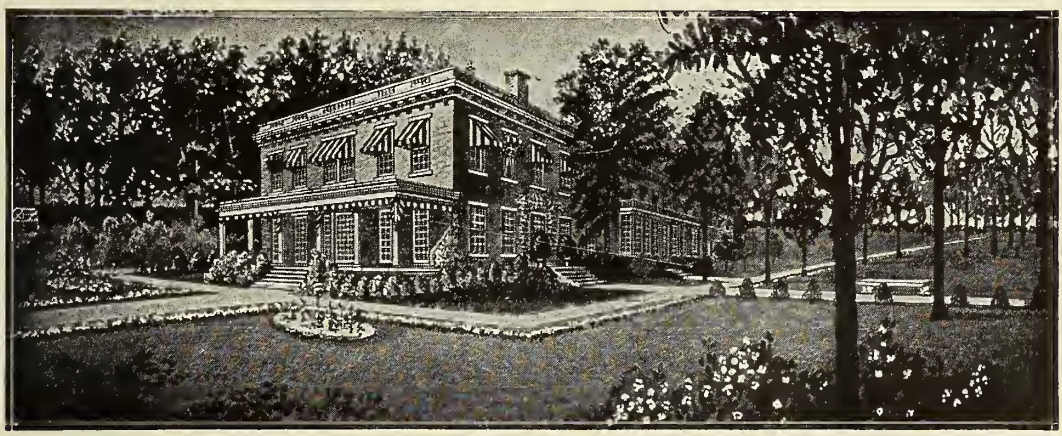
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(Continued from page 972)

interim meeting or make a per diem appropriation for the officers attending.

"There is no need of having paid speakers on the program. The program should not be filled with set speeches, but should consist of symposiums and panel discussions led by our own officers and members, with more opportunity for discussion from the floor.

"In such a meeting it should be the financial obligation of the State Association to provide for notices, publicity, place of meeting, clerical help, and other necessary facilities.

"3. *Place of meeting.* The Indiana State Medical Association's annual convention has already outgrown the housing and convention facilities of the state. We are now confined to Indianapolis or possibly French Lick for our annual convention. There are several of the larger cities in various sections of the state that could provide adequate hotel and meeting accommodations for the interim session. A rotation of the interim session to various parts of the state would bring the state association in closer contact with the county societies.

"4. *What other state associations are doing.* I recently requested the state headquarters to send out a questionnaire on what other states are doing regarding an annual Secretaries' Conference or interim session. All of our neighboring states are holding some sort of interim, secretaries', or county officers' meetings. Several states are holding interim or special meetings of their House of Delegates, and the A.M.A. is now holding annual interim meetings, including meetings of its House of Delegates.

"Our annual meetings of the House of Delegates have been overburdened with work and much hasty and inadequately considered action has been the result. I feel that we will eventually find it necessary or advisable to hold regular interim or special sessions of our House of Delegates. These meetings could be held on call in conjunction with the interim session.

"5. *Who should preside?* It seems logical to me that the president of our state association should preside at the interim session and outline his policies and the problems that are to be considered during his administration. At this point I wish it definitely understood that none of these suggestions should take place next year or apply to my administration. If any changes are considered advisable, they should be incorporated in the Constitution and By-Laws, and therefore could not become established until 1950.

"In fairness to Dr. Mitchell, chairman of the Secretaries' Conference, I wish to say that there was nothing in the discussion of the Executive Committee, or in this subsequent report, that is intended as a criticism of his actions or administration. He has done a splendid job for many years. He has received national recognition for his work, and has been reelected as chairman of the Secretaries' Conference in 1949, our centennial year.

"I submit this report for your future consideration, and I do not recommend that any official action be taken at this time."

On motion of Drs. Mitchell and Garber, action on this matter was postponed until the next meeting of the Council.

There being no further business, the meeting was adjourned at 3:00 P.M.

EXECUTIVE COMMITTEE

July 10, 1948

Roll call showed the following present: C. H. McCaskey, M.D., chairman; Walter L. Portteus, M.D.; Cleon A. Nafe, M.D.; A. P. Hauss, M.D.; Alfred Ellison, M.D.

Guests: A. F. Weyerbacher, M.D., treasurer; Frank B. Ramsey, M.D., associate editor of THE JOURNAL; Albert Stump, attorney; Ray E. Smith, executive secretary; Norman R. Booher, M.D., secretary-treasurer, Indiana Academy of General Practice; Clark W. Day, M.D., and Lester D. Bibler, M.D.

Statements of receipts and expenditures for June for the association and THE JOURNAL were approved.

Membership Report

Number of members July 10, 1948	3,605*
Number of members July 10, 1947	3,534
Gain over last year	71
Number of members Dec. 31, 1947	3,618

* Includes 55 in military service (gratis) 177 honorary members.

Treasurer's Office

Dr. Weyerbacher reported that the Auditing Committee had held its annual meeting at the Indiana National Bank on July 7.

Mutual Medical Insurance, Inc. The treasurer of the association, who is also treasurer of Mutual Medical Insurance, Inc., reported upon the financial condition of the insurance company.

1948 Annual Session, Indianapolis, October 26, 27 and 28, 1948

Badges. On motion of Drs. Ellison and Portteus the purchase of special badges for association officers and certain committeemen is to be continued.

Scientific exhibit awards. On motion of Drs. Hauss and Portteus, the committee voted against presenting any other award to scientific exhibitors in 1948 other than the certificate of appreciation.

Requests of special medical organizations. On motion of Drs. Hauss and Portteus, permission was granted to special medical organizations to have tables and uniform signs in the technical exhibit hall for sale of luncheon and banquet tickets, but these organizations are not to solicit or accept membership dues at the state medical association meeting. Announcements of luncheons or dinners of these special organizations are to be included in the printed convention program.

(Continued on page 976)

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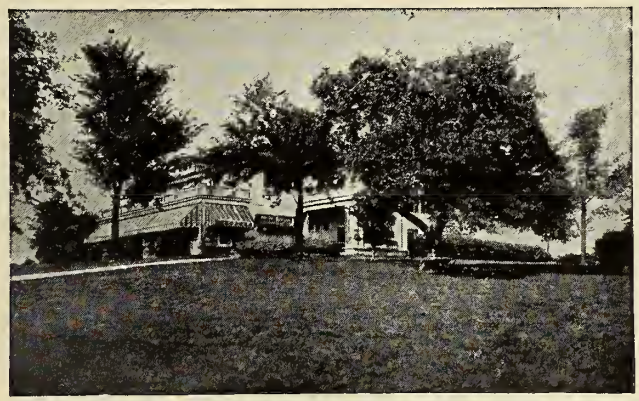
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(Continued from page 974)

Legislative Matters

Local

Resolution of Indiana Association of Pathologists. Appointment of a committee to study the recommendation contained in a resolution adopted by the Indiana Association of Pathologists for a revision of the coroner statutes of Indiana was authorized on motion of Drs. Portteus and Ellison.

Organization Matters

Field secretary. Dr. Nafe, reporting for the subcommittee appointed to interview applicants for the field secretary position, said that four applicants had been interviewed to date but the subcommittee was not ready as yet to make a recommendation.

Indiana headquarters at A.M.A. meetings. On motion of Drs. Nafe and Portteus, the committee is to recommend to the Council that Indiana headquarters be established at future A.M.A. meetings.

Membership in Hoosier State Press Association. On motion of Drs. Nafe and Ellison this membership is to be continued.

Fifty-Year Club. On motion of Drs. Hauss and Ellison, the president of the association is to select one of the recipients of the Fifty-Year Club award to make the response to the presentation of these awards at the annual banquet.

Indiana Cancer Society

On motion of Drs. Hauss and Portteus, a bulletin issued by the vice-president and chairman of the Committee on Medical Service of the Indiana Cancer Society concerning cancer diagnostic clinics was approved, with the provision that the bulletin be sent only to presidents and secretaries of county medical societies and medical staffs in cancer diagnostic center areas, and that the Council of the Indiana State Medical Association be asked to concur in the action of the Executive Committee.

Carnegie Institute, Inc.

Letter received from the chairman of the Board of Registry of the Registry of Medical Technologists of the American Society of Clinical Pathologists stating that the Carnegie Institute is claiming that its courses are approved by the Indiana State Medical Association. On motion of Drs. Nafe and Portteus the executive secretary was directed to request the Carnegie Institute not to give the impression directly or indirectly to applicants that this training school is approved by the state medical association.

Future Medical Meetings

School Administrators-Physicians Conference, September 29, 1948, Indianapolis.

A.M.A. Secretaries' and Editors' Conference, November 28-29, 1948, St. Louis.

Interim Session of A.M.A., November 30 to December 3, 1948, St. Louis.

The Journal

Report on advertising.

Increase in July	$ 164.85
Decrease	142.80
Total increase, July	$ 22.05
Total increase for year	$1,340.93

"Medicine of the Year." On motion of Drs. Ellison and Portteus, the committee turned down the proposal of Dr. John B. Youmans, dean of the College of Medicine, University of Illinois, and associates, for offering a medical review known as "Medicine of the Year" to Indiana physicians through the columns of THE JOURNAL.

Articles on special organizations. On motion of Drs. Nafe and Ellison, the associate editor of THE JOURNAL was directed to present all articles from special organizations in which memberships are solicited to the Executive Committee or the Council for approval before they are printed in THE JOURNAL.

There being no further business, the committee adjourned to meet again at 10 a.m., daylight saving time, Sunday, August 22, 1948, at the Columbia Club.

COMMITTEE ON PUBLICITY

July 16, 1948

Present: Homer G. Hamer, M.D., chairman; James O. Ritchey, M.D.; Marlow W. Manion, M.D.; Cleon A. Nafe, M.D., and Ray E. Smith, executive secretary.

The annual report of the committee to the House of Delegates was approved.

The executive secretary reported that the packets containing material against compulsory sickness insurance for mailing to twenty-three Indiana college libraries and to presidents of the county units of the Woman's Auxiliary in the state were completed, with the exception of some articles to be mimeographed, and that the packets would be mailed within the next week.

Letter from Radio Providence Productions, offering transcribed radio program entitled "Doctor's Orders," was discussed and no action taken pending hearing of one of the program platters at the next meeting.

The executive secretary reported that two news releases entitled, "Anderson Boy Receives $2,000 Medical School Scholarship" and "Nursing School Scholarships Awarded to Two Girls," had been sent out since the last meeting.

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Books

Books received are acknowledged in this column, and such acknowledgment must be regarded as a sufficient return for the courtesy of the sender. Selections will be made for more extensive review in the interests of our readers and as space permits. Books listed in this department are not available for lending. Any information concerning them will be supplied on request.

* * *

BOOKS RECEIVED

MODERN CLINICAL PSYCHIATRY. By Arthur P. Noyes, M.D., Superintendent, Norristown State Hospital, Norristown, Pennsylvania. Third edition. 525 pages, Cloth. Price $6.00. W. B. Saunders Company, Philadelphia, 1948.

CORONARY HEART DISEASE. By A. Carlton Ernstene, M.D., chief of the section on cardiovascular disease, Cleveland Clinic, Cleveland, Ohio. 102 pages. Fabrikoid. Price $2.50. Charles C. Thomas, Publisher, Springfield, Illinois, 1948.

PRACTICE OF ALLERGY. (Second Edition) By Warren T. Vaughan, M.D., Richmond, Virginia. Revised by J. Harvey Black, M.D., Dallas, Texas. 1132 pages with 333 illustrations. Fabrikoid. Price $15.00. The C. V. Mosby Company, St. Louis. Copyright 1948.

HANDBOOK OF OPHTHALMOLOGY. By Everett L. Goar, M.D., Professor of Ophthalmology, Baylor University College of Medicine, Houston, Texas. 166 pages with 45 text illustrations and 7 color plates. Cloth. Price $5.50. The C. V. Mosby Company, St. Louis. Copyright, 1948.

GENERAL ENDOCRINOLOGY. By C. Donell Turner, Ph.D., Associate Professor of Zoology, Northwestern University. 604 pages with 164 illustrations. Cloth. Price $6.75. W. B. Saunders Company, Philadelphia and London. Copyright 1948.

MEDICAL WRITING, The Technic and the Art. (Second edition) By Morris Fishbein, M.D., Editor, *The Journal of the American Medical Association*, with the assistance of Jewel F. Whelan, Assistant to the Editor. 292 pages with 36 illustrations. Cloth. Price $4.00. The Blakiston Company, Philadelphia. Copyright 1948.

BOOKS REVIEWED

CLINICAL DIAGNOSIS BY LABORATORY METHODS —A Working Manual of Clinical Pathology. By James Campbell Todd, M. D., with the collaboration of George Giles Stilwell, M.D., Division of Clinical Laboratories, The Mayo Clinic. Eleventh edition. 954 pages with 397 figures. Cloth. Price $7.50. Philadelphia and London: W. B. Saunders Company, 1948.

The first edition of this book was published in 1909 and now, nearly 40 years later, the eleventh edition is off the press.

There have been many changes in the previous editions due to the rapid advancements made in Clinical Pathology through the years. This eleventh edition however, is a completely revised and re-edited book. There is a complete rearrangement of subject matter and several new chapters have been added.

The usefulness of the book is greatly enhanced by many very fine illustrations, charts, graphs and color plates. It contains twenty-one chapters, an appendix and a special index of laboratory findings in important diseases. It is a book which will be of great value to teachers, students, medical technicians and physicians.

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INDUSTRIAL DISEASES OF THE CHEST*

L. E. HAMLIN, M.D.†

CHICAGO

A DISCUSSION of industrial chest conditions would be incomplete without a review of silicosis, but that familiar occupational entity is now so well-known that it seems preferable to consider some of the unrelated ailments which simulate it rather than the various phases of the disease itself. The distinction is important because of economic, medicolegal and employee health implications, and the far-reaching effects of inaccurate diagnosis on both management and labor demand recognition and correction.

Unfamiliarity on the part of some physicians concerning more recent developments in the field of industrial chest diseases is regrettable, but insistence on making dogmatic diagnoses in spite of the lack of accurate information is inexcusable. It is most difficult to overcome the effect on a worker when once he has been told by his family physician that shadows observed in his chest x-ray are the result of silicosis when actually there has been no significant exposure. Such interpretations frequently result in unjustified claims for compensation as well as unnecessary apprehension on the part of the employee.

Chest conditions whose x-ray patterns simulate silicosis may be classified as industrial or nonindustrial. Among the causative agents responsible for lung affections in the industrial group are dusts from such organic materials as cotton, sugar cane and tobacco. Cases of byssinosis have been reported in this country but the disease seems to be less prevalent than in England, where the Byssinosis Act of 1940 awards compensation for total disability following periods of exposure up to 20 years.

Ritter and Nussbaum,[1] following a thorough investigation of the cotton industry in Mississippi in 1944, concluded that no evidence was found to justify the existence of byssinosis as a clinical entity among employees in a cross section of the cotton industry in that state. They did find that certain allergic individuals showed asthmatic reactions to high concentrations of cotton dust but no other manifestations of actual disease were evident.

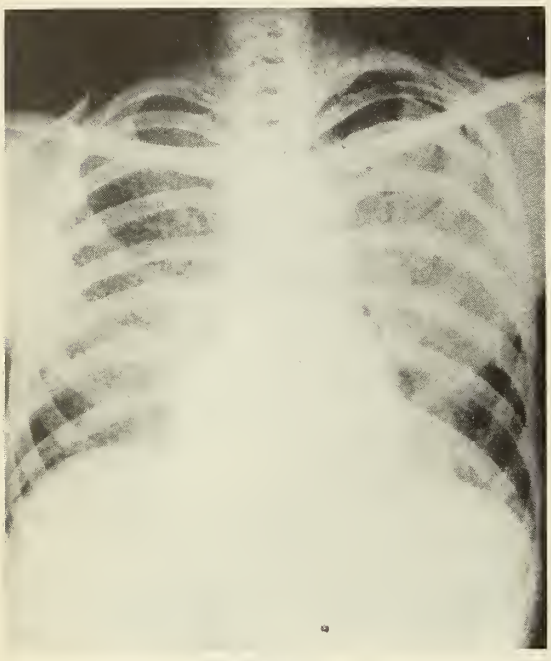
Castelden and Hamilton-Patterson,[2] in the British Medical Journal, in 1942, described symptoms consisting of dyspnea, cyanosis, violent cough, scanty sputum, and mild elevation of temperature in workers exposed for one to two months to fibers of bagasse, a waste product of sugar cane after the extraction of sugar. The condition was also described by Gillison and Taylor,[3] who stated that the x-ray appearance suggested a bilateral pneumonia of the influenzal type which resulted in varying degrees of fibrosis or else cleared up completely. The reaction in the lungs to this dust was considered a possible allergic manifestation. Observation of 4,000 workers in the tobacco industry over a period

* Presented at the Third Industrial Health Conference, in Indianapolis, April 16, 1947.

† Medical Director American Brake Shoe Company, Chicago.

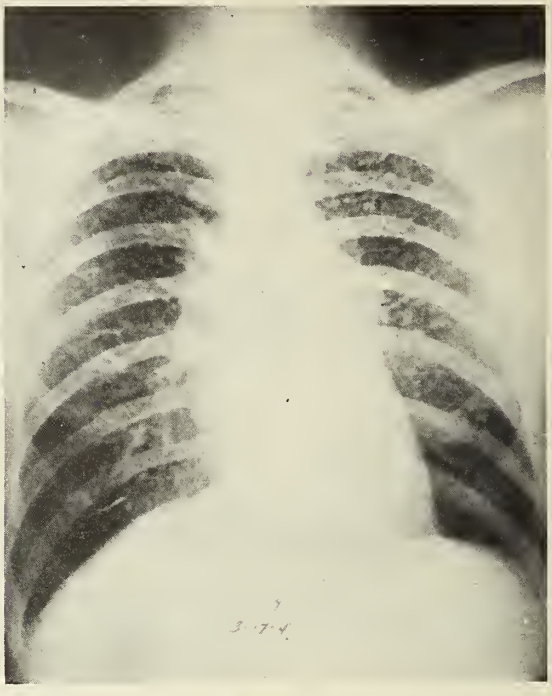
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FIGURE I



Bagassosis
Courtesy of Dr. J. Hannon

FIGURE II



Silicosis

of 10 years convinced C. F. Long[4] that "Tabacosis does not develop in the lungs of those who inhale tobacco dust." His study covered an investigation of 1,247 employees with known tobacco dust exposure as compared to 1,007 with no exposure.

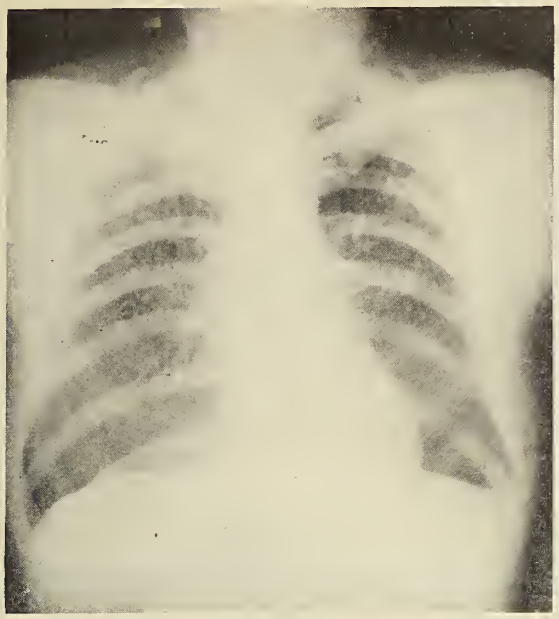
Dusts such as those produced from limestone, chalk, marble, carbon, and cement may produce accentuated linear markings in the x-ray but they are relatively inert. They do not cause definite symptoms and frequently are only discovered in routine chest x-ray surveys. Barium, iron and tin may produce radiopaque deposits in the perivascular lymphatics and interalveolar septa which closely simulate silicosis in its discrete nodular form but these residues do not appear to have real significance except from the medicolegal aspect. A possible exception may be found in Stannosis or changes in the lungs resulting from exposure to tin and its compounds. Observations by some workers in this field in recent years have aroused suspicion that such deposits may not be entirely innocent. However, thus far nothing definite in the way of toxic or pathologic manifestations has been established.

The nodulations in arc welders, described by Sander and Enzer[5] in 1938, demonstrated that an x-ray pattern almost indistinguishable from silicosis can result from the inhalation of iron oxide fumes. Exposure to free silica in these cases was lacking and postmortem findings on one case showed no evidence of fibrosis. Histologically there were simple deposits of pigment about the blood vessels which gave a typical Prussian-blue reaction for iron. The striking similarity between these cases and a number in our own experience among foundry grinders and burners led to the inauguration of an experimental study on the effect of air-borne grinding dusts on laboratory animals. The work was begun approximately a year and a half ago under the direction of the late Dr. L. U. Gardner at the Saranac Laboratory, Saranac Lake, New York. Analysis of representative samples of the dust in this industry indicated that while free silica was not present in sufficient amounts to produce silicosis, enough iron oxide in respirable sized form did exist to account for the roentgenographic changes observed. Preliminary findings in the lungs of animals after eight to ten months' exposure to this dust show faint diffuse dust pigmentation grossly in guinea pigs and white rats, but microscopically only scattered inactive dust cells without evidence of actual fibrosis. Chest x-rays of rabbits exposed to inhalation of the same dust for ten months were essentially negative and the dust had no apparent effect on accelerating tuberculous infection in those animals in which the disease had been introduced.

The occupational fibrosis which results from the inhalation of asbestos fibers, particularly those over 2 microns in length, is believed to be caused by a mechanical plugging of the alveoli or the formation of fibrotic sleeves along the terminal

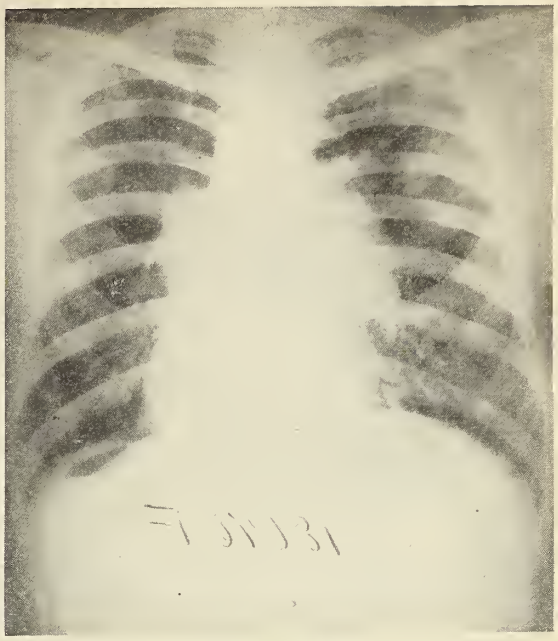
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FIGURE III



Siderosis

FIGURE IV



Sarcoidosis
Courtesy of Dr. P. Bamberger

bronchioles. The condition is observed most frequently in such operations as mining and crushing crude asbestos. In 1940 Gardner[6] stated that at that time 27 percent of exposed workers were involved and in those with more than 15 years experience the percentage rose to 60. The characteristic x-ray finding is the so-called "ground glass" appearance which differs considerably from the nodular pattern of silicosis.

Within the last few years lung changes have been observed in some workers in the beryllium industry. X-ray findings range from diffuse haziness in both lung fields to discrete large or small nodules which may disappear after one to four months. While the action of beryllium is thought to be a toxic one, affecting the skin, nasal mucous membranes and pulmonary tissues, its exact effect has not been definitely established. Van Ordstrand[7] and his associates have reported beryllium poisoning in 170 workers in an industry in which the metal was used in the manufacture of precision instruments during the war. Chemical pneumonitis developed in 38 employees in this group and progressed without exacerbation or remission either to complete recovery or to death. Postmortem examination on 5 cases showed typical pneumonitis without definite fibrosis. In 1946 Hardy and Tabershaw[8] reported 17 cases of delayed chemical pneumonitis occurring in a fluorescent lamp manufacturing concern where beryllium compounds were used. Six deaths occurred in this group and recovery was very slow in the remaining individuals. A few are still disabled. The distinctive feature of the disease was the delay in onset following exposure, and progression of the illness in spite of removal from the hazard.

Mycotic diseases such as aspergillosis, moniliasis, bronchial asthma due to wood dust spores, coccidioidomycosis, blastomycosis and actinomycosis while attacking the mucous, cutaneous, subcutaneous, osseous and visceral structures, may produce x-ray patterns in the lungs which can be very difficult to distinguish from nodular silicosis. The roentgenographic changes vary from accentuated linear markings and miliary sized densities which may coalesce, to discrete nodular opacities scattered throughout the parenchyma of the lungs. Clinical evaluation correlated with x-ray findings and the history should facilitate the diagnosis in individual cases. These diseases are usually not considered industrial. They are endemic in certain regions but in spite of the lack of occupational prevalence, cases of mycotic infection do occur in certain industries. Such an instance was reported by Coe[9] in September 1945, where a worker in the Chicago stockyards, who was exposed to dust which was mixed with hay, corn and straw, developed aspergillosis and received an award for compensation from the Industrial Commission of Illinois.

Infection with Coccidioides immitis produces coccidioidomycosis, a disease endemic in Central

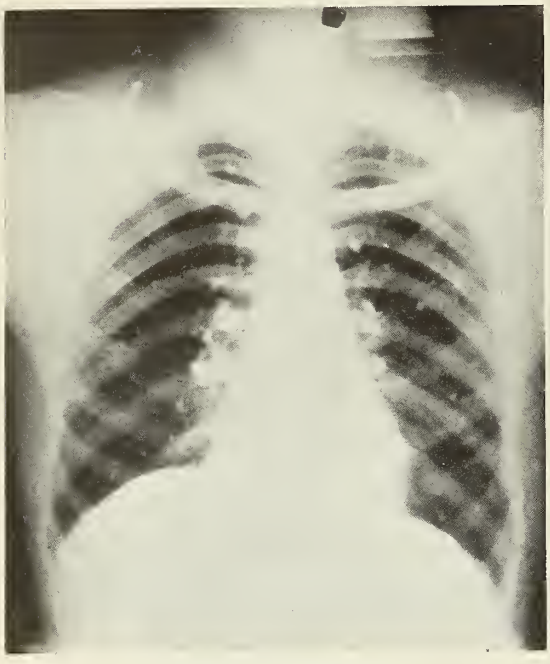
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9. Coe, G. C.: Ann. Int. Med., 23, 423-425, September, 1945.

FIGURE V



Miliary Calcification

California, Arizona, and Texas. It may be encountered occasionally in any region and should not be confused with coccidiosis, which refers to an infection by one of the animal parasites included under the order of coccidia of the class Sporozoa. The symptoms resemble those of influenza or bronchopneumonia and may imitate tuberculosis. X-ray findings include discrete nodular shadows or confluent areas of pneumonitis, depending on the stage of the lesion. Densities appear in the bases of the lungs or radiate from the hilus into the upper lobes. Cavitation may occur which may be most difficult to differentiate from tuberculosis. In making a diagnosis it is essential to consider not only the clinical history, exposure and x-ray findings, but also the cutaneous reaction to coccidioidin and the identification of Coccidioides immitis spherules in the sputum.

Other conditions whose x-ray appearances may simulate silicosis are miliary tuberculosis, metastatic carcinoma of the lungs, vascular changes associated with age and hypertension, mitral stenosis, miliary calcification, bronchiolitis, polycythemia vera and Boeck's sarcoid. Here again careful consideration of occupational exposure and evaluation of the physical examination should eliminate the possibility of error in arriving at a satisfactory diagnosis.

The occurrence of a number of cases of sarcoidosis in certain industries using beryllium and its compounds has given rise to speculation as to whether this condition should be classified as an occupational disease. Sarcoidosis was first described in 1875, at which time it was thought to be a skin condition. Later it was found that the process involved the lungs, bones, lymph nodes and other organs. The etiology is unknown but histologically, according to King,[10] the lesions resemble those of tuberculosis. Giant cells may be seen but caseation does not occur and demonstration of the tubercle bacillus is rare, either by staining methods or animal innoculation. Tuberculin tests are usually negative even with strong dilutions. A study by Longcope and Pierson failed to show the presence of fungi in the lesions of sarcoidosis. In a recent editorial in *The American Review of Tuberculosis*, Pinner[11] states that of all authors who have expressed a positive opinion as to the causative agent in sarcoid lesions, the majority believe that the tubercle bacillus is directly or indirectly involved.

Katz, Cake & Reed[12] note that pulmonary lesions are common in sarcoidosis but x-ray films of the chest are not a guide to the severity of the disease. They have observed that widespread lung involvement may occur where there is little evidence of a generalized process. On the other hand, extensive lesions may be present in other organs when very little can be seen in the chest roentgenogram. A bilateral nodulation resembling miliary tuberculosis is frequently observed in the x-ray while at times a soft infiltration similar to caseous pneumonic tuberculosis, with or without cavitation, is present. Often the only pulmonary manifestation is marked bilateral, symmetrical enlargement of the hilar and peribronchial lymph nodes. The lesions have a tendency to resolve completely, leaving no residual fibrosis. In King's series of cases this occurred in an average time of twenty-two months. Gardner[13] recently stated: "While this disease occurs here and there throughout the population at large it has frequently been attributed to pulmonary irritants of industrial environments. Recently a considerable number have been found in industries using beryllium and its compounds. It has not occurred in every plant using these materials. It has not been possible to reproduce a sarcoidosis with beryllium compounds in animals." His conclusion was that much remains to be done before it can be stated that sarcoidosis is an industrial disease.

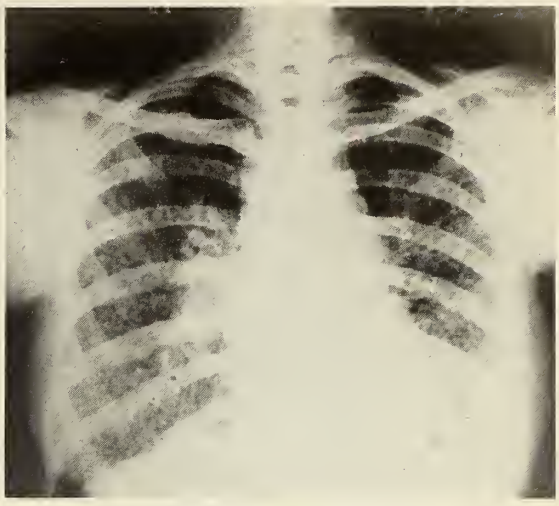
Miliary calcification or "wheatena," as it is sometimes called, is a condition frequently seen in the chest x-rays of people living in certain states such as Missouri, Mississippi, Ohio, and Kansas. The multiple, dense, sharply defined nodular shadows have on occasion been diagnosed as silicosis but their characteristic appearance, particularly when considered in connection with the possibility of oc-

10. King, Donald S.: Sarcoid Disease as Revealed in the Chest Roentgenogram. Am. J. Roent. & Rad. Therapy, 45:4, April, 1941.
11. Pinner, Max: Editorial on the Etiology of Sarcoidosis. Am. Review of Tuberculosis, 54:6, December, 1946.
12. Katz, Sol, Cake, C. P., and Reed, H. R.: Sarcoidosis. New England J. Med., 229:498, 508, September 23, 1943.
13. Gardner, L. U.: The Diagnosis of Silicosis. Indust. Hyg. Dig., 9:11, November, 1945.

cupational exposure, should eliminate such an interpretation. The actual causative agent in the production of these densities has not been definitely established but it is thought to be the result of healed infection of obscure origin. High, Zwerling & Furclow,[14] reporting on 113 cases of miliary calcification, tested 108 with tuberculin and histoplasmin. Of these, 104 cases, or 96.3 percent, reacted to histoplasmin, while only 4 had negative reactions to this antigen. None reacted only to tuberculin. This finding appears to be strong evidence that disseminated calcifications are not caused by tubercle bacilli but probably by the agent producing sensitivity to histoplasmin.

Five cases of rheumatic mitral stenosis, presented by Hurst, Bassin & Levin[15] in 1944, showed linear and nodular patterns which might easily be confused with silicosis. The nodular shadows in the x-ray films were thought to be due to hypertrophied blood vessels seen in horizontal section or "caught on end," vascular engorgement throughout the pulmonary fields or calcium deposits resulting from healed small infarcts sometimes associated with severe passive congestion. A case of mitral stenosis, confirmed at autopsy, in which the roentgenogram indicated diffuse fibrosis, was presented by D. A. Hanson[16] in the *Lancet* of September, 1945. The patient had worked as a bricklayer for 15 years and a sandblaster for 5 years, but the postmortem examination revealed no macroscopic evidence of silicosis.

FIGURE VI



Polycythaemia Vera
Courtesy of Dr. J. Hannon

CONCLUSIONS

From consideration of the conditions herewith presented it is obvious that the diagnosis of industrial chest conditions is not a simple matter. Too frequently an opinion is based on the x-ray alone without taking into consideration all the factors involved. Unless there has been definite exposure to hazardous dust, as demonstrated by actual counts of respirable sized particles of free silica in the breathing zone of the worker, one should be extremely cautious about making an interpretation of silicosis even though the roentgenogram strongly suggests it.

14. High, R. H., Zwerling, H. B., and Furclow, M. L.: Disseminated Pulmonary Calcification. Public Health Report; Tuberculosis Control Issue, 62:1, January, 1947.
15. Hurst, A., Bassin, S., and Lewin, I.: Miliary Densities Associated with Mitral Stenosis. Am. Review of Tuberculosis, 49:3, March, 1944.
16. Hanson, D. C.: Mitral Stenosis and Silicosis. Lancet, 13:2, September 29, 1945.

THE INSTRUCTIONAL COURSE SCHEDULE AND ORDER BLANK ARE ON

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TOXEMIA OF PREGNANCY*

Richard D. Bryant, M.D.

CINCINNATI

THE theme of this paper is toxemia of pregnancy, and particularly its treatment. I shall limit it to two of the seven types of toxemia as defined by the American Committee on Maternal Health. These two are preeclampsia and eclampsia.

At the Cincinnati General Hospital we consider eclampsia to be nothing more than preeclampsia which has progressed to the stage of convulsions. Conversely we do not consider eclampsia to exist unless convulsions have occurred. Convulsions or coma represent the final step in the development of the disease itself although there may, of course, be complications in the form of failure of specific organs (anuria, cardiac failure, cerebral hemorrhage) or sequelae (chronic hypertension). The only reason for considering preeclampsia and eclampsia separately is that convulsions are such definite symptoms that they form a convenient criterion for classification, and also detract markedly from the prognosis.

Let us consider for a moment the cause of toxemia. Unfortunately the word etiology has been misused in connection with toxemia. Much has been written about it, and yet the etiology is perfectly evident—preeclampsia and eclampsia obviously are caused by the products of conception, or more specifically by the placenta. This should be clear from the fact that preeclampsia and eclampsia occur only in the pregnant female, and that the presence of a fetus is not required, as shown by the occurrence of toxemia with hydatid mole.

How the placenta causes toxemia is completely unknown. There is not even universal agreement as to what the fundamental changes in the physiology are. More and more evidence is accumulating, however, that abnormal vasoconstriction is the most significant change—certainly most of the signs and symptoms can be explained on this basis —the course of events being: vasoconstriction—decreased blood flow in the smaller arterioles—local anoxemia—edema. Vasoconstriction may not be universal, or may vary in degree in different parts of the body, accounting for the variations seen clinically in signs and symptoms. Vasoconstriction in the kidneys produces damage to the tubular epithlium and glomerular membranes, resulting in albuminuria and decreased urinary output. In extreme cases, bilateral cortical necrosis may result. In the liver focal necrosis may result, and generalized edema of this organ can cause epigastric pain. In the brain, moderate degrees of edema may cause severe headache, with vomiting, or may cause excess irritability of the motor strip so that convulsions occur. Pathologically there are no findings pathognomonic of eclampsia. In either preeclampsia or eclampsia there may be cloudy swelling of various cellular elements, and in many cases punctate hemorrhages, focal necrosis, and thrombosis of the smaller arterioles, but we believe it is impossible to say, with any degree of accuracy, on the basis of pathological slides alone, whether a patient did or did not have eclampsia. In the series of cases which I shall mention later, we have very little opportunity, however, to prove this point.

Can toxemia be prevented? So far as I know it cannot be; at least there is no specific preventative. However, it has been observed that the incidence of toxemia is unusual in groups of well-nourished patients, in good general health, on a well-balanced diet—well-balanced in respect to all dietary elements, protein, carbohydrate, fat, fluid, minerals, and vitamins. Perhaps the most important single aid in the prevention of the development of toxemia is the restriction in weight gain by dietary means. There is no question but that the incidence of toxemia is greatest in the group of patients who gain excessively. For the average normal patient the total weight gain should be limited to twenty to twenty-five pounds; in the overweight patient to little or no gain, or even a loss of weight. Even when the caloric intake is restricted, however, the diet should be kept in balance.

Usually there is little difficulty in detecting toxemia in its earliest stages. The first symptom frequently is a sudden, excessive gain in weight (greater than one pound a week). In the untreated case this is usually followed shortly by clinical edema, some increase in blood pressure, and albumin in the urine. The progress of the disease can often be arrested and reversed at this stage, again by nonspecific treatment, but by measures which have been found effective by trial and error. These measures are:

1. Review of the diet with special attention to adequate protein and fluid intake.
2. Restriction of salt—none to be used in cooking or at the table, and salty foods to be eliminated from the diet.
3. A dram (more or less) of Epsom salts by mouth each morning—enough to produce two or three stools daily.
4. Ammonium chloride—30 to 60 grains a day.

On this regime the patient can be treated on an ambulatory basis and distinct improvement usually results.

Should the condition become worse, however, with increasing edema, albuminuria and blood pressure, especially should signs of cerebral irritation appear, treatment must be more vigorous. If possible,

* Presented before the Twelfth District Meeting of the Indiana State Medical Association, May 6, 1947, at Fort Wayne.

hospitalization should be effected. The patient should be confined in bed, especially if cerebral symptoms are marked. The following measures should be adopted:

1. Magnesium sulfate—50 percent solution—5 cc. by injection into the buttock muscles every 8 hours.
2. 20 percent dextrose in water—400 cc.—*not* in saline—intravenously at least once daily.
3. Salt-free but otherwise regular diet.
4. 3,000 cc. fluids daily, by mouth.
5. Avoidance of medication containing the sodium ion—especially sodium bicarbonate.
6. Assure adequate bowel elimination.
7. Check blood pressure several times a day.
8. Measure intake and output.
9. Warn the patient and all attendants of the very great significance of headache, blurred vision, stupor and vomiting.

In the responsive case, considerable improvement should be noted within 24 to 48 hours. If the patient is within a week or so of term it is often advisable to induce labor by some simple means after maximum improvement has occurred. If there are several weeks yet to go, it may be possible to return the patient to the ambulatory type of treatment, but only if marked improvement is evident. In practically all cases some improvement will be noted. Where improvement occurs, but the patient gets worse as soon as the treatment is relaxed, then it is usually advisable to terminate the pregnancy, both for fear convulsions will occur, and because of the danger of permanent hypertension resulting. This sequela is one which too often is not taken into consideration. It has been established fairly conclusively that the incidence of chronic hypertension following toxemia is in direct proportion to the length of time the toxemia existed, *not* to its severity.

If the toxemia fails to improve under the suggested treatment, or was severe when first seen, one additional drug will almost guarantee complete control of the condition until the uterus can be emptied. This is Veratrum viride, in the form of Veratrone, about which more will be said later, The dose is 3 to 10 minims, to be repeated as needed.

Eclampsia itself—that is, toxemia of pregnancy with convulsions—is treated exactly as is severe toxemia: Veratrone, 50 percent magnesium sulfate by deep injection, 20 percent dextrose intravenously, and abundant fluids by mouth. Oxygen is helpful if cyanosis persists after a convulsion. The usual measures to prevent injury to the patient — mouth-gag, et cetera — are advisable. We have found the elaborate precautions to avoid external stimuli are unnecessary.

The suggested course of treatment will control eclampsia in nearly every case. If the patient has already delivered, recovery will be prompt. In the undelivered case, the additional problem of terminating the pregnancy arises. If the patient is in labor, delivery should be effected as if the patient were nontoxic, except that elective low forceps are probably indicated, even if normal delivery is anticipated, this to eliminate the bearing down effort (and coincident rise in blood pressure) required for spontaneous delivery. The patient must be watched very carefully for at least 48 hours postpartum, to prevent the recurrence of convulsions. Pituitrin is not to be used; it is definitely contraindicated, because of its pressor effect. Pitocin, the specific oxytoxic fraction of postpituitary extract, may be used safely. During labor morphine should not be used.

The most serious problem is presented by the eclamptic not in labor. In these cases, the problem of emptying the uterus is added to the purely medical problem of controlling convulsions and reversing the course of the toxemia. We stress most emphatically that no effort should be made to induce labor until there has been marked improvement in the toxemia. This usually requires at least 48 hours after the last convulsion, and in many cases a longer period is required. Our usual procedure is to do a careful sterile vaginal examination, force a finger into the cervix, and strip the membranes from the lower uterine segment. If conditions are satisfactory—engaged head, soft cervix, two finger dilatation—the membranes may be ruptured. The hydrostatic bag should be used if these measures fail. Although we have not used it, cesarean section should be considered if the cervix is long, closed and hard. We believe it is extremely important not to perform cesarean section on an eclamptic until there is marked improvement in the general condition—decrease in edema, increase in urinary output, and complete absence of cerebral symptoms. Cesarean section should be thought of as a measure to prevent the recurrence of convulsions, and not as one to stop convulsions. Spinal anesthesia is satisfactory, although local or general can be used. As in the intrapartum case, the first two days postpartum are critical ones from the standpoint of recurrence of the convulsions.

I would like to speak a little more at length about Veratrone. It is an aqueous solution of Veratrum viride, adjusted to one-fourth the strength of the official U.S.P. tincture. It is to be used hypodermically. Its important pharmacologic action is vasodilatation. Clinically its effect is dramatic. In the average case, within 15 minutes after the administration of 5 minims, the blood pressure drops, sometimes to as low as 100 or less, due to vasodilatation. (The indication for such a drug in toxemia seems to us to be self-evident. If, as we believe, there is abnormal vasoconstriction present, resulting in a marked decrease in the amount of blood in the peripheral arterioles, then it seems reasonable to believe that the relaxation of this vasospasm will increase the flow of arterial blood to all parts of the body. The incidental decrease in the blood pressure, as determined clinically, is thus an indication of improved circulation. This reasoning is diametrically opposed to that of the school of thought which believes: (1) that the first pathologic change in toxemia is interference with

the function of kidney cells in such a way that absorption of water from the blood, and excretion of water is interfered with; (2) that the blood pressure increases to force water through the damaged kidney cells; and therefore (3) any attempt to lower the blood pressure by any means whatsoever is absolutely contraindicated.) Coincidentally with the fall in blood pressure, there is a slowing of the pulse and respiration, and sweating may occur. Vomiting and retching nearly always follow. The effect on the blood pressure and pulse lasts for a variable length of time, usually several hours, but this variability is very important, as it makes routine repetition of the dose impractical. An order to give Veratrone every 3 or 4 or 6 hours should never be given. It is to be given only when there is need for it as indicated by the blood pressure. We make it a practice to keep the blood pressure from rising higher than a level 20 points below the level at which convulsions occurred. In the first few hours after treatment is started this involves checking the blood pressure every half hour; later the interval may be prolonged to 2 or 3 hours. In the delivered case we have made the observation that by 48 hours after the last convulsion the blood pressure can safely be allowed to go above the previous convulsive level, without jeopardizing the patient. This emphasizes the point that the drug is not used primarily to keep the blood pressure down. This is unnecessary except in the rare cases where cardiac decompensation occurs because a damaged heart is organically incapable of maintaining the required pressure. Veratrone is used, rather, to keep the pressure below the convulsive level so that when the danger of convulsions is past the blood pressure need not be kept down.

The use of the other therapeutic agents is self-explanatory. Dextrose protects the liver and acts as a dehydrating agent. Magnesium sulfate also is dehydrating, and may have some sedative effect. Fluids are necessary to maintain a good urinary output, since the water bound in the tissues is unavailable for excretory purposes. You may have noticed that I have made no mention of the use of sedatives. We believe that sedatives are not necessary. The method of treatment outlined is effective, sedatives are not needed; in fact, they may even be contraindicated. It seems irrational to give a patient in coma a drug which will further deepen the coma. Also, large doses of sedative may conceal the true degree of coma, and the comatose patient is harder to handle, and more important, is unable to take fluids in adequate quantities. Morphine specifically is contraindicated with our regime because it seems to have a neutralizing effect on the action of Veratrone. Occasionally we have had to use barbiturates on a violently restless patient, although more often than not restlessness is due to a full bladder, full rectum, or uterine contractions.

Our experience with this method of treatment now covers 168 cases of eclampsia. Three patients died: one 14 days postpartum, of sepsis; one 65 days postpartum, of sepsis; and one 5 hours after admission, in shock and coma. Except for the latter case the treatment of the eclampsia itself was fully effective. The gross mortality rate is, then, 1.8 percent and the corrected rate 6/10 of 1 percent. In 120 cases for which we have worked out detailed statistics, convulsions were completely and permanently controlled within one hour in 83 percent of the cases, and 90 percent had either no convulsions or not more than one after treatment was started. Dr. Kellogg, of Harvard University Medical School, has written that this method of treatment is the most rapidly effective one which he has ever seen.

In conclusion, I believe I can safely recommend this method of treatment. It has been proved clinically. It is not unduly complicated, and can be maintained and even instituted quickly by nurses and interns. It is not expensive. It is not dangerous to the patient. And it is rational when considered in the light of our present knowledge. It is not the ideal method of treatment, but until the isolation of the specific agent produced by the placenta which causes abnormal vasoconstriction, and then the discovery of the specific antidote for this agent, no more logical approach to the solution to the problem will be effected.

VOICE OF MEDICINE

Dear Editor:

Needing some Penicillin, I called a local druggist and asked him the price of the 10 cc. vial of procaine—G Penicillin in oil, put out by four leading drug houses. All four priced their item to the doctor at $11.67.

I received a circular through the mail from a drug house which sells direct to physicians. Their price for this same item was around $8.00.

A local manufacturing druggist called at my office and during our conversation he remarked that he buys Penicillin for bottling at 30c per million units.

Hmm. What goes on here?

A local M.D.

INFECTIOUS MONONUCLEOSIS—A REVIEW OF THE DISEASE*

WILLIAM W. DALTON, M.D.**

INDIANAPOLIS

INTEREST in infectious mononucleosis has been increasing, not only because of its wide distribution and frequency, but also because of its protean nature. In fact, more investigation only reveals the wide complexity of the disease. For example, since the first description of the disease, cases have been divided into three types, namely: (a) anginose, those having sore throats; (b) glandular, those with little or no throat involvement but having enlarged lymph nodes; and (c) febrile, those in which glandular enlargement is late. We are now fully aware of the fact that this classification is not adequate and leads to a false sense of security because of the various atypical forms of the disease.

Infectious mononucleosis is defined as an acute benign infection of unknown etiology characterized by irregular fever, swelling of the lymph nodes, sore throat, splenomegaly, and lymphocytosis, with abnormal lymphocytes in the blood. The blood serum may contain antibodies against sheep erythrocytes in high titers. Some writers have pointed to the term, infectious mononucleosis, as misleading since it suggests the presence of monocytes in the blood. Other names for the disease have been suggested, but to date none has been accepted.

The first discussion of the disease to appear in the literature is credited to Emil Pfeiffer[1] who, in 1889, called attention to a symptom complex occurring in children which he considered to be infectious and of epidemic nature. The outstanding symptoms which he noted were the hepatomegaly, splenomegaly, the swelling of the lymph nodes along the posterior border of the sternocleidomastoid muscle, and the failure of the glands to suppurate. The first report of glandular fever, as it was then called, to appear in the American literature was submitted by West[2] in 1896. He described a large epidemic in Ohio of three years' duration. In 1918 Duessing,[3] during an epidemic of diphtheria, separated several cases which differed from others, in that there was cervical lymphadenopathy as well as a generalized lymphadenitis, with enlargement of the liver and spleen.

The term "infectious mononucleosis" was used for the first time by Sprunt and Evans[4] in 1920. They noted that the lymphocytes in the peripheral blood were bizarre in appearance, giving a varied blood picture. Tidy and Morley,[5] in 1921, described an epidemic of infectious mononucleosis associated with lymphocytosis. They suggested that cases described earlier as acute leukemias with recovery were really examples of infectious mononucleosis. An important contribution was made in 1932 when Paul and Bunnell[6] discovered that blood serum with the sporadic form of the disease may contain antibodies against sheep erythrocytes in a concentration far above the normal titer.

The etiology of this disease has remained obscure since its earliest clinical recognition. The demonstration of the fusospirochetal group of organisms in a considerable percentage of cases with exudative throat lesions has not led to any convincing evidence of their etiologic importance. Isolation of Listerella monocytogenes from blood cultures of patients with the disease has been reported but lacks confirmation. The most promising field of study is that of the filtrable virus but this has not yielded any conclusive results.

Transmission presents certain puzzling features, but one must conclude that its contagiousness is low. Cases have been treated in a general ward without any spread. During epidemics multiple cases are frequently encountered in a single household. However, in not a single instance, notably among medical members who live and work in intimate contact with one another, could the disease be attributed to direct contact. The appearance of sudden outbreaks suggests that there may be carriers.

Almost all writers have emphasized the fact that infectious mononucleosis is a disease largely of children and young adults. With a few exceptions in army ranks, epidemics have not been encountered in any group above the age of college students. Of Pfeiffer's original twenty-four cases, fifteen were under thirteen years of age. The apparent frequency of the disease among individuals working about a hospital has been overemphasized. Sporadic cases, unless studied by the aid of repeated differential blood counts, may readily be

* Presented before the Indianapolis Medical Society on May 27, 1947.

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[1] Pfeiffer, E.: Drusenfieber, Jahr. f. Kinderh, 29:257, 1889.

[2] West, J. P.: An Epidemic of Glandular Fever. Arch. Pediat., 13:889, 1896.

[3] Deussing, R.: Ueber Diptherieahnlicke Angineu Mit Lymphatischer Reaktion. Deutsch. med. Wchnschr., 44. 513, 1918.

[4] Sprunt, J. P., and Evans, F. A.: Mononuclear Leukocytosis in Reaction to Acute Infections. Bull. Johns Hopkins Hosp., 31:410, 1920.

[5] Tidy, H. L., and Morley, E. B.: Glandular Fever. Brit. Med. J., 1:452, 1921.

[6] Paul J. R., and Bunnell, W. W.: The Presence of Heterophile Antibodies in Infectious Mononucleosis. Am. J. Med. Sc., 183:90, 1932.

overlooked, while medical students or nurses, promptly admitted for treatment, are almost certain to be diagnosed by routine methods of examination.

It is impossible to ascertain the incubation period because the mode of transmission is not known, thus making it difficult to know when or how the person was exposed to the disease. In general, the acute febrile stage of the disease lasts from seven to twenty-one days. Barring relapses which may prolong the course as long as six months, the duration is rarely more than one month.

Symptoms at the onset are varied. Associated with fever there may be chills and sweats, headache, dizziness or faintness, malaise, and retro-orbital aching. Anorexia is common. Fatigue, asthenia, and prostration may seem out of proportion to the apparent severity of the illness. Nervous irritability at the onset and during the course of the illness is often marked. The symptoms of an upper respiratory infection such as rhinitis, hoarseness or cough may be present.

The sore throat which is frequently present is not an essential feature of the disease. Bernstein[7] considers it a complication of the basic disease in the same sense that meningitis is a complication of meningococcic septicemia, or mouth lesions a complication of agranulocytosis. The temporal relation of sore throat is variable; it may precede the disease, be associated with the onset or course of the illness, or make its appearance after recovery has taken place.

Pain in the neck, combined with stiffness, may occasionally herald the onset of the disease, preceding the appearance of fever by twelve days. This may become severe enough to suggest the possibility of a meningitis. The enlargement of the posterior cervical lymph nodes may account for this.

Fever usually appears promptly, may reach a peak within several days, but generally not for four to eight days. The fever usually assumes a remittent form with afternoon rises. Particularly characteristic is the secondary rise after an initial drop to normal. Usually the temperature parallels the course of the disease. Occasionally completely afebrile cases are seen.

Much could be said regarding the time of appearance, size and distribution of enlarged lymph nodes. Enlarged nodes may be the first indication of illness. They may appear suddenly, and enlargement is noted in twelve hours or less. The duration is variable; it may be as long as a year, or as transitory as one to two days. The cervical nodes are most frequently involved. Pfeiffer was impressed by the enlargement of the nodes about the sternocleidomastoid muscle. The occipitals, submentals, axillary, epitrochlears, and inguinals are most commonly affected. Suppuration of nodes is rare. There are, however, many instances of infectious mononucleosis without pheripheral gland enlargement at any time in their course.

Puffiness of the eyelids appeared at the onset of one of the cases reported by Bernstein.[7] This may be as striking as is observed in trichinosis. Conjunctivitis may be the presenting sign at the onset. Guthrie and Pessel[8] emphasize the dry granular character of conjunctivitis which occurred in 8 to 9 percent of their cases. It was usually unilateral, sometimes was the only sign of the disease, and, when present, was endowed by them with considerable diagnostic significance.

Cardiac disturbances in infectious mononucleosis are unusual, but certain sequelae have been reported which indicate that there may occasionally be involvement of the heart during an attack. In one of Longcope's[9] patients ventricular extrasystoles were noted both clinically and by electrocardiogram, but the latter method disclosed no other abnormalities. Bernstein[7] describes a definite case of infectious mononucleosis which terminated fatally after the complication of empyema. A small, rheumatic-like lesion on the mitral valve was disclosed at autopsy, although there had been no clinical evidence of a valve lesion. Even more convincing is the story of a young girl known previously to have a normal heart, who within six weeks of recovery from infectious mononucleosis developed manifestations of myocardiac insufficiency and was found to have signs of mitral stenosis. The process interpreted as rheumatic progressed so that the patient died seven years later of myocardial failure. The effect of a severe attack upon an individual with an already damaged heart may be to bring on acute cardiac failure.

Splenomegaly is mentioned as a symptom. Tidy concludes that the spleen is palpable in at least 50 percent of cases. Halcron, Owen, and Rodger[10] reported a series of 296 cases and found that the spleen was palpable in 10 percent of the cases. The splenic enlargement, usually demonstrated by the end of the first week, may occasionally appear later. The organ may remain enlarged for weeks or even months. Bernstein[7] describes a patient whose spleen descended eight centimeters below the costal margin during the acute illness. There was still demonstrable enlargement seven years later.

A more serious complication referable to the spleen which has been observed is spontaneous rupture of that organ. In 1941 King[11] reported the case of a young man who, at the height of his disease, suddenly developed the picture of an acute abdominal complication with shock. He was taken to surgery, and it was discovered that the spleen

[7] Bernstein, A.: Infectious Mononucleosis. Med., 19:85, 1940.

[8] Guthrie, C. C., and Pessel, J. F.: An Epidemic of Glandular Fever in a Preparatory School for Boys. Am. J. Dis. Child, 29:492, 1925.

[9] Longcope, W. T.: Infectious Mononucleosis with a Report of Ten Cases. Am. J. M. Sc., 164:781, 1922.

[10] Halcron, J. P. A., Owen, L. M., and Rodger, N. O.: Infectious Mononucleosis with an Account of an Epidemic in an Emergency Medical Service Hospital. Brit. M. J., 2:443, 1943.

[11] King, R. B.: Spontaneous Rupture of the Spleen in Infectious Mononucleosis. New Eng. J. Med., 224:1058, 1941.

had ruptured. Splenectomy was performed and the patient recovered. Darley, Black, Smith and Good[12] reported a similar case which recovered following splenectomy. Pathological examination of this spleen disclosed rupture and hemorrhage with an increase in lymphoid elements and the presence of an atypical cell similar to that of infectious mononucleosis as found in the peripheral blood. In 1944 Zeigler[13] reported another case of spontaneous rupture of the spleen.

The liver is enlarged less commonly than the spleen. The edge of the liver may reach to a point six to seven centimeters below the costal margin. Jaundice may appear in the absence of an enlarged liver. Mackey and Wakefield[14] described the first case of this sort. The number of such cases reported prior to 1944 was about twenty-seven.

The cause of jaundice in this disease is not clear. It has been credited to both hepatic and glandular obstruction of the hepatic ducts. Leavell and McNeil[15] found the blood cholesterol lowered to 50 and 60 milligrams percent during a bout of jaundice, with an icteric index of 58. During convalescence the cholesterol rose to 199. This suggests intrinsic hepatic damage. Monat[16] found normal cephalin flocculation, cholesterol-ester ratio and normal bile drainage in the presence of an icteric index of 81 and bile in the urine. These data, according to Boger,[17] appear to be contradictory, to wit: normal bile drainage in the face of obstructive phenomena.

Nephritis may be associated with infectious mononucleosis. Among 270 cases reported up to 1921, nephritis appeared in 6 percent. This usually appears in the first or second week and hematuria may be the initial symptom of this illness. The abnormal constituents of the urine are predominantly red and white blood cells and albumin; less commonly, hyaline and granular casts are observed. Oliguria is an exception; there is neither edema nor retention of nitrogenous products. Renal function remains unimpaired, the course is benign, recovery rapid and invariable.

The hemorrhagic phenomena seen in this disease are of interest. As early as 1895 it was recognized that a severe epistaxis might usher in this syndrome. This symptom is probably the most common of hemorrhagic manifestations. The bleeding may be profuse and may appear at any time during the course of the disease.

Read and Helwig[18] observed 300 cases of infectious mononucleosis. In six cases the patients had anemia, and in three of this group there were leukopenia and thrombocytopenia, which came on rapidly. In none of these three cases were any of the usual clinical manifestations of infectious mononucleosis present, with the exception of mild adenopathy. One patient had many petechiae over the entire body, a small hemorrhage of the conjunctiva of the left eye, and clotted blood in the left nasal cavity. One patient vomited 700 cc. of bright red blood and clots on one occasion, and passed several black stools which contained occult blood.

The occurrence of a true thrombocytopenic purpura in conjunction with infectious mononucleosis is rare. Perhaps the most authentic case of true purpura is that recorded by Magner and Brooks,[19] in which hematuria, bleeding gums, purpuric eruption, prolonged bleeding time and a reduction in platelets were combined with lymphocytosis, a palpable spleen, moderate enlargement of inguinal nodes, and a Paul-Bunnell test of 1:800. The condition cleared in six to eight weeks.

Loyd[20] reported a case in which the patient had hemorrhagic blebs over the tongue and buccal mucosa and petechiae over the body. Epistaxis and hematuria appeared during the course of the illness. The platelet count was 66,000 and the Paul-Bunnell test was positive 1:512.

In addition to purpuric eruptions, many other types of skin rashes have been observed. A typhoid-like eruption is often seen. This maculopapular rash appears usually between the fourth to seventh days, most commonly on the fourth or fifth, but occasionally as late as the tenth. A morbilliform eruption may appear and may become confluent, leaving a temporary residual pigment. Other eruptions which may appear and have been observed are described as scarlatiniform, typhus-like, urticarial, and vesicular.

Symptoms referable to the nervous system have been observed. One symptom common to practically all cases in the literature is headache. Other symptoms described are difficulty in speech, sluggishness, mental confusion and ptosis. Johansen[21] suggested that some of the obscure encephalitides encountered may actually be infectious mononucleosis. Zohman and Silverman[22] reported a case of a young man twenty-one years of age, who was admitted to the

[12] Darley, W., Black, W. C., Smith, C., and Good, F. A.: Spontaneous Splenic Rupture. Am. J. M. Sc., 208-381, 1944.

[13] Zeigler, E. E.: Spontaneous Rupture of the Spleen in Infectious Mononucleosis. Arch. Path., 37:196, 1944.

[14] Mackey, R. D., and Wakefield, E. G.: The Occurrence of Abnormal Leukocytes in the Blood of a Patient with Jaundice (Infectious Mononucleosis or Glandular Fever). Ann. Clin. Med., 4:727, 1936.

[15] Leavell, B. S., and McNeil, J. O.: Infectious Mononucleosis, Unusual Manifestations. Virginia Med. Monthly, 69:180, 1942.

[16] Monat, H. A.: Infectious Mononucleosis Simulating Infectious Jaundice. Rev. Gastroenter., 11:114, 1944.

[17] Boger, W. P.: Infectious Mononucleosis of Unusual Severity with Review of Jaundice Cases Occurring in this Disease. South. M. J., 37:546, 1944.

[18] Read, J. T., and Helwig, F. C.: Analysis of 300 Cases of Infectious Mononucleosis with Three Characterized by Rare Hematologic Features. Arch. Int. Med., 75: 376, 1945.

[19] Magner, W., and Brooks, E. F.: Infectious Mononucleosis with Acute Thrombopenic Purpura. Canad. Med. Assn. J., 47:35, 1942.

[20] Loyd, P. C.: Acute Thrombocytopenic Purpura in Infectious Mononucleosis. Am. J. Med. Sc., 207:620, 1944.

[21] Johansen, H. H.: Serous Meningitis and Infectious Mononucleosis. Acta Med. Scandinav., 76:269, 1931.

hospital with the complaint that he was unable to move either his hands or feet. The tongue deviated to the left and there was a left peripheral facial paralysis present. He was able to move only the fingers and toes. Deep reflexes were abolished. The Paul-Bunnell test was positive 1:1024. In a few weeks there was atrophy of the muscles of arms, forearms and hands of both upper limbs. With supportive treatment and orthopedic measures, motor power was restored in all extremities to a marked degree, but there was some weakness of the left upper and left lower extremity as compared with the right. Richardson,[23] in 1942, described a case of paralysis of the serratus magnus muscle, occurring in the third week of a typical case of infectious mononucleosis. Coogan, Martinson, and Mathews[24] describe four patients, all proven cases of infectious mononucleosis. All four of these patients exhibited some toxic cerebrospinal symptoms; one had negative neurological findings; three had a definite increase in the spinal fluid pressure; one had an increased number of lymphocytes in the spinal fluid; and one had a definite Guillain-Barre syndrome.

Some of the symptoms of this disease may point to difficulties in other parts of the body and lead to other diagnoses, as in the case reported by Straus.[25] The patient was a white woman, aged eighteen years, who complained of pain and generalized abdominal discomfort. Pain later localized over McBurney's area. Temperature was 101.3°F. Leukocyte count was 5,000 with a relative lymphocytosis, of which some were reported as "pathological lymphocytes." Sheep cell agglutination was positive 1:4096. An appendectomy was done. The microscopic changes in the lymphoid tissue of the appendix and in an enlarged lymph node taken from another case of infectious mononucleosis were essentially the same. Examination of the essential cells of the lesion in both tissues under oil immersion with a comparison ocular revealed identical morphological characteristics.

More could be said concerning the protean nature of this disease, but the facts already mentioned serve to emphasize the point that diagnosis is not always an easy matter. Having made the diagnosis in a case of infectious mononucleosis, what is one to expect concerning the course of the disease?

Relapses are not uncommon. Bernstein,[7] reporting a large series of cases, describes three patients who, after becoming afebrile, had a return of fever within three to seven days. In one group of nine infants, five had relapses, the interval between attacks varying from five to twenty-four days. Recurrences are rare. In one individual two attacks occurred five years apart. The recurring episodes do not necessarily assume identical forms so that in one case, for example, jaundice may be the presenting symptom; in another, glandular enlargement.

According to practically all writers, the prognosis is favorable, and the patient is usually well in three to four weeks. In some cases, the glands may remain enlarged for several months, the lymphocyte percentage or the type of cell may be abnormal and the patient may feel badly for a long time—as long as five or six months. In not a single case reported has uncomplicated infectious mononucleosis proved fatal. Two fatalities have been reported in the literature. Death was attributed to pulmonary complications, bronchopneumonia[26] and empyema.[27] It is probable that most of the fatal cases that have been reported were instances of severe sepsis and generalized lymphadenopathy rather than infectious mononucleosis.

How can the diagnosis be made in a case where this disease is suspected? Sokal[28] states that the diagnosis is now based on three essential factors: (1) the clinical picture, (2) the hematologic findings, and (3) serologic reactions.

The blood picture is interesting as well as informing. In infants and children the earliest change in the blood may be an increase in polymorphonuclear leukocytes with a shift to the left, followed later by lymphocytosis. A similar condition may be found in young adults. The erythrocyte count and hemoglobin are usually normal. At some stage of the illness the total leukocyte count is elevated. Extreme leukocytosis is rare. In general, the leukocyte count parallels the course of the disease. In the presence of leukopenia, lymphocytosis, or a combination of these two factors, there may develop a neutropenia at times attaining profoundly low levels. Mononucleosis usually appears in the first four or five days of the illness and rapidly reaches a peak within a week or ten days. Having reached this peak, the mononucleosis gradually diminishes over a period of several weeks or months.

The abnormal or "leukocytoid" lymphocyte deserves some comment. Bernstein[7] describes it in the following manner. The cell is variable in size, shape and staining properties. It ranges in size from that of a small lymphocyte to that of a monocyte. The nucleus which may occupy a portion or almost all of the cell, may be round, bean-shaped, or irregular, centrally or eccentrically situated, and

[22] Zohman, B. L., and Silverman, E. G.: Mononucleosis and Encephalomyelitis. Ann. Int. Med., 16:1233, 1942.

[23] Richardson, J. S.: Serratus Magnus Palsy. Lancet, 1:618, 1942.

[24] Coogan, T. J., Martinson, D. L., and Mathews, W. A.: Neurological Symptoms of Infectious Mononucleosis. Ill. M. J., 87:296, 1945.

[25] Straus, R.: Infectious Mononucleosis Simulating Acute Appendicitis with a Description of Specific Lesion of Appendix. Am. J. Clin. Path., 10:576, 1940.

[26] Gooding, S. E. F.: On Glandular Fever or Infectious Mononucleosis. Practitioner, 127:468, 1931.

[27] Du Bois, A. H.: De La Pathogenie De L'angine a Monocytes. Acta Med. Scandinav., 73:237, 1930.

[28] Sokal, H. B.: Infectious Mononucleosis from Point of View of General Practitioner. N. Y. State J. Med., 43: 848, 1943.

typically darkly, but coarsely stained. The cytoplasm may be light, but characteristically is deeply basophilic and vacuolated or "foamy"; a few azurophilic granules may be present. A small portion of these cells, as well as the normal small lymphocytes, may show fenestrations in the nuclei, an appearance produced by actual holes piercing the nucleus in various directions.

The sheep cell agglutination test is of great value in the diagnosis of infectious mononucleosis. As has been stated previously, this test was introduced in 1932 by Paul and Bunnell. The materials required to determine the titer of sheep cell agglutinins are the patient's serum, a suspension of sheep red cells, and physiological saline. The serum is inactivated and dilutions, starting with 1:4, are carried out. According to specific directions, a suspension of the sheep cells is added to each tube of diluted serum. The tubes are later examined and any tube in which there is macroscopic agglutination of sheep cells is considered positive.

What constitutes a positive test? The two methods in common use in this country are the Paul-Bunnell and the Davidsohn. Many authors follow the originators of these methods in calling the lower level of positivity 1:32 with the former and 1:56 with the latter technic. Other investigators, however, state that the titer should be at least 1:160 in order to constitute a positive test.

The time at which the test becomes positive can not be stated with certainty. It is probably safe to say that the test is positive, if it is going to become so at all, when the test is first performed, for it is usually not until four or five days have elapsed that the correct nature of the illness is suspected. Some writers state that the test may become positive as early as the third day, but sometimes not until the second month or not at all. Davidsohn[29] observed abnormal titers in ten cases from twenty-six to one hundred and fourteen days after the onset of the disease. An elevated titer may disappear as rapidly as two weeks after its appearance.

A positive test supports the diagnosis of infectious mononucleosis; but a negative test does not rule it out, according to Kaufman.[30] The percent of cases with negative sheep cell agglutination tests varies a great deal in different series of reported cases. Van Ravensway,[31] for example, stated that all sixteen of his cases had a positive test. Others do not report such high percentages. Cases with positive agglutination tests vary from 43 to 100 percent, with most authors reporting 80 to 90 percent. Paul stated that an incidence of 90 percent positive tests in their series may indicate that they were relying too much upon the sheep cell test for diagnosis.

The question arises whether or not there is such a thing as a false positive Paul-Bunnell test. Bernstein[7] states that the test is most valuable in the differentiation from leukemia. Kracke[32] states that leukemia may be excluded with a high titer but a low titer does not establish its existence. Paul and Bunnell[6] reported only one exception, a rather obscure case of either aleukemic leukemia or aplastic anemia giving a positive test in a serum dilution of 1:28. Kent[33] reported a case of leukemia, which he considered to be monocytic, wherein the agglutination test was highly positive. The question arises whether this is a case of leukemia with superimposed infectious mononucleosis.

Another confusing feature is the false positive serologic reaction for syphilis seen in some cases of infectious mononucleosis. Apparently Parkes-Weber[34] in 1930 was the first to recognize this fact. Tidy[35] stated that during an epidemic of the disease in England in 1930 about one-half of the cases on whom Wassermann tests were made gave transient positive reactions. Gooding[26] in 1931 stated that sixteen of twenty-seven patients with infectious mononucleosis gave either positive or doubtful Wassermann tests. Hatz[36] in 1938 published one clear-cut case with a strongly positive transient Wassermann and a negative Kline test. Bernstein[37] in 1938 published an account of six cases in which the Wassermann, the Eagle flocculation test, or both, became temporarily positive during the course of infectious mononucleosis. From 1930 to 1942 about 191 such cases were reported.

In most of the reported cases the false positive tests returned to normal within nine weeks. If one feels reasonably certain that the tests are falsely positive, the patient's blood should be tested for at least twelve weeks before antisyphilitic treatment is started.

It is hoped that this review of the complex problem of infectious mononucleosis will be of aid in recognizing the disease. We must bear it in mind in the differential diagnosis of such diseases as diphtheria, septic meningitis, catarrhal jaundice, secondary syphilis, typhoid and leukemia.

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[29] Davidsohn, I.: Serologic Diagnosis of Infectious Mononucleosis. J.A.M.A., 108:289, 1937.

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[31] Van Ravensway, A. C.: The Heterophile Agglutination Test in the Diagnosis of Infectious Mononucleosis. New Eng. J. Med., 221:1001, 1934.

[32] Kracke, R. R.: Diseases of the Blood and Atlas of Hematology, p. 511. J. B. Lippincott Company, Philadelphia and London, 1937.

[33] Kent, C. F.: "False" Positive Paul-Bunnell Reaction? Am. J. Clin. Path., 10:576, 1940.

[34] Parkes-Weber, F.: Glandular Fever and Its Lymphotropic Blood Picture—Sometimes without Obvious Glandular Enlargement. Medical Press and Circular, 130:65, 1930.

[35] Tidy, H. L.: Glandular Fever and Infectious Mononucleosis. Lancet, 2:180, 1934.

[36] Hatz, B.: The Wassermann Reaction in Infectious Mononucleosis with a Report of a Case with Unusual Clinical Features. Am. J. Clin. Path., 8:39, 1938.

[37] Bernstein, A.: False-Positive Wassermann Reactions in Infectious Mononucleosis. Am. J. M. Sc., 196:79, 1938.

THE JOURNAL

OF THE

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DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

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THE JOURNAL'S PLATFORM

1. **Preservation of American Medicine through voluntary service to the sick.**
2. **Advocating full-time county or district health officers, locally appointed.**
3. **Restoration and preservation of our natural waters and resources.**
4. **Maintain the present high standard of the Indiana University Medical Center, combining the full medical course in Indianapolis.**
5. **Elimination of diphtheria and smallpox through immunization and vaccination.**
6. **Support of the state-wide campaign against undulant fever.**

Editorials

OUR PRESIDENT

ALONG about April 23, 1892, the farming community in upper Fulton County, Indiana, heard the news that a son had been born to a neighboring farmer. The farmer still lives on the ancestral acreage, though his good wife passed on four years ago. This son was given the name of Cleon A. Nafe—we never did learn what the middle initial stood for.

Cleon attended the rural schools of the community until such a time when he "outgrew" them, then betook himself over to the county seat, Rochester, where he entered high school. Later he taught for one year in the rural schools of the county and for two years at the Fulton high school. Later on he went to Indiana University, where, as is still natural for Indiana youth, he went into athletics—track and basketball. He was awarded the University "I" in track. Then on into the University Medical School, at his graduation being appointed as an intern in the City Hospital.

Then followed a two-year term as resident physician and four years as superintendent of the hospital, now known as the Indianapolis General Hospital. Since 1926 he has limited his practice to general surgery, being located in Indianapolis since that time.

In 1945 he served as president of the local society and, beginning in 1936, he served as chairman of the Executive Committee of the Indiana State Medical Association for a period of ten years, getting out of this job only because he was destined to become the president-elect of his state association. So much for the "historical" data, although it might be mentioned that he holds membership in numerous of our national medical organizations.

For some reason or another the young Hoosier

went outside the state to pick himself a wife, the lucky young lady being Eunice Katherine Shouse, of Lexington, Kentucky. There are two children, Francis Louise and a son, Cleon Albert, who will graduate from Indiana University this year.

His has, indeed, been a busy life, most of his professional career having been devoted to the furtherance of organized medicine. No one who has been active in association affairs will deny that Doctor Nafe has done a monumental work as the directing head of the most important assignment in the long history of the Indiana State Medical Association. Along with many others, we have not always agreed with his opinions—on occasion we have rather vigorously opposed some of them, but, looking back through the years, we all agree that Nafe has done a wonderful job, and trust that for years to come we may have the benefit of his sound advice on many matters.

In our book he will be listed as a man who came up the "hard way," by dint of everlastingly sticking to it, always ready to don the harness and do his full share of the pulling.

INDIANA HEART FOUNDATION

DURING the past year the Indiana Heart Foundation has been formed and has become an integral part of the American Heart Association. Both of these groups are voluntary organizations in which laymen and physicians have combined their resources and talents toward the control and treatment of heart disease.

The Indiana Heart Foundation, under Dr. Robert M. Moore as president, has announced a statewide program for the initiation of its activities. The work of the foundation is to be directed along three main channels. The first of these will be the improvement of facilities for treatment, the second will be for research in heart disease, and the third will be directed to the procurement of financial support.

A survey is now being conducted to determine the existing facilities in Indiana for the handling of cardiac patients. As a corollary to this work information is being gathered at the same time in regard to the needs of the medical profession for new therapeutic facilities. Officers of the foundation are interested in receiving requests and recommendations from members of the profession throughout the state.

The research program is being opened by the establishment of fellowships for research in cardiovascular diseases at the Indiana University Medical Center.

During the coming year the foundation is planning to work with the county medical societies in sponsoring and assisting in the organization of symposia for scientific meetings. A committee has been appointed to respond to the requests of the county societies for the arrangement of panel discussions and teaching clinics in cardiac disorders.

The activities of the organization will be financed jointly by the state group and the American Heart Association. Funds are made available through membership fees, donations and bequests, and as a result of the annual subscription campaign held during National Heart Week. A large portion of the money secured in any locality is utilized by the foundation in the same area. The Indiana Foundation will retain a major portion of the contributions obtained in the state, and will also receive a fair share of the funds raised by the national organization.

Hoosier physicians have enthusiastically supported the Indiana Heart Foundation. By their participation in its organization and in the development of its clinical and research program they have assured a well-balanced plan for furthering their aims in the alleviation of cardiovascular diseases.

ANNIVERSARIES

THESE things have their place, of course, but long after one has completed his allotted span of life they become a problem. In our own case we decided long since to have no more truck with them.

But in the past year or so there have been so many "Centenary Anniversaries" that one just has to listen to them all. Last year the American Medical Association reached the age of 100, so we just had to do something about that. Come next year our own Indiana State Medical Association reaches that pinnacle, and for some months past "Uncle Charley" Combs has been delving deep into all sorts of records and his final report, as relayed through the columns of THE JOURNAL, will of course be a masterpiece, such as only Charley could get together.

The Indianapolis Medical Society recently held a similar celebration and "Bill" Wishard has gathered together the numerous speeches made on this occasion.

And now comes the information that Central State Hospital, the first mental state hospital within Indiana, will be "of age" in November.

Along with these major events we have local societies who have reached the age of fifty or more years, along with a lot of our members who have completed a half-century in the practice of medicine—all these want to be "written up" in the columns of our magazine.

Frankly, this just cannot be done—we do not have space for all this material—and, if you have read our reports from time to time as to the rising costs of producing your magazine, you will agree

with us that the cost would be an astronomical figure.

We ask that you be a bit patient with us in case you do not have an immediate response to your requests and your suggestions.

Right now, the "backlog" of papers in our files—papers on scientific subjects—is the largest in our history and some of the writers are becoming a bit impatient because their papers are not appearing in our magazine. The whole matter is being referred to the Editorial Board at the October meeting and no doubt some plan will be worked out to correct some of the false impressions that seem to exist.

As a matter of fact, it is our opinion that much of this material—anniversaries and such—will be given to Dr. Combs, that he may incorporate them in his historical issue.

Editorial Notes

Down in Parker, Randolph County, they had a big party the other evening. Someone had discovered that a local physician, Dr. P. C. Barnard, was about to celebrate his eightieth birthday and that for nigh onto fifty years he had been engaged in the practice of medicine, most of that time right in that thriving little community. So, they decided to make an evening holiday of it, friends and former patients from the country roundabout dropping in for the evening.

According to newspaper reports, Dr. Barnard was not at all upset by the demonstration—he liked it, of course, as who wouldn't? He carried on his usual routine through the day, and in the evening, when folk began to gather to pay their homage to this good doctor, he was not at all perturbed. For almost fifty years he had known these people and, to him, they were just the same folk he had known through all that time.

He says he wore out four buggies in the early days, but did not say how many automobiles he had used since.

Such events are most wholesome ones and we will wager that every "man-jack" in that neighborhood wants nothing to do with the regimentation of medicine—they want their own doctor, just as he is!

Physicians wishing to arrange for reunions of various groups during the sessions of the Indiana State Medical Association October 26, 27 and 28, are asked to communicate with Dr. O. W. Sicks, 1010 Hume-Mansur Building FRanklin 1419.

Dr. Sicks is chairman of the Fraternity and Class Committee for the state meeting, with Drs. James S. McBride and Allan K. Harcourt as additional members.

The Instructional Course feature of the state association's Annual Session has become one of its very popular and useful features. It was first given at the Indianapolis session in 1943 with 16 classes. It has been necessary to increase the course for this coming session to 30 classes. Throughout these years, however, the nature of the courses has been unchanged.

Each class has been limited in attendance to 30 men in order that an intimacy could be established, and question and answer discussion conducted. This plan has been extremely popular.

All classes have been planned for the men doing general practice. They are a form of Refresher Course reduced to its practical elements.

The reservations received up to press time indicate that all of the classes of the 1948 session will be fully attended, although openings still exist in each course. If you can get to Indianapolis for these classes, you will find them a real treat. Get your reservation in today's mail. There IS a limit to each class.

OPPORTUNITY FOR PHYSICIANS TO SEE BROADWAY MUSICAL HIT

Physicians and their wives attending the annual state medical association session in Indianapolis will have an opportunity to see Irving Berlin's Broadway musical show, "Annie Get Your Gun," which opens at the Murat theater Wednesday night, October 27. This is an "open night" on the convention program except for special group dinners, which expect to be concluded by 8:30 p.m., curtain time. Ticket information may be procured from a Murat theater advertisement on page 1117.

President's Page

POLITICS AND MEDICINE

LIKE water and oil, politics and good medical care do not mix. Germany and France tried two different systems and the results are well known. Even before the war the quality of medical care had greatly deteriorated Their medical discoveries and contributions to medical science had practically vanished.

New Zealand's seven-year health security program has been hailed as a shining example by those in the United States who favor tax-paid medical care for all the people. Recent reports indicate many serious difficulties with the program. Soon after the system was inaugurated, in 1941, demands for medical services tripled and large crowds waited for hours to see the overworked physicians. The people and politicians howled for better service. When the physicians returned from war and furnished the services the costs became almost unsurmountable. Now the politicians want all the service but can't pay for it unless the physicians do it for less. The physicians balk at spending the long hours for little pay. What will happen if there should be a recession, no one knows.

England has launched an extensive socialistic medical care program and already there are reports of much dissatisfaction with the adventure. Undoubtedly some of our lend-lease money is being used to finance the experiment.

How many people in the United States would desire to trade their medical care for that of the above-mentioned countries? Obviously the answer is very few. Politics strangulates good medical care.

Yet President Truman is openly advocating compulsory government health insurance as proposed by the Wagner-Murray-Dingell bill, in the hope of reviving his waning chances for reelection. He has asked Federal Security Administrator Oscar Ewing, former Wall Street lawyer, to prescribe a ten-year health plan for the nation. Recently, Mr. Ewing made his report, recommending that the national, state, and local governments must spend vast sums of money for health services, because the American people are sadly lacking in the medical services they are receiving. He states that the medical services are available, but that less than 20 percent of our families can afford to purchase these services.

To the surprise of no one, he recommended federal compulsory health insurance, stating that voluntary health insurance has not covered the field sufficiently. He makes this statement even though Blue Cross and Blue Shield in eight years have increased their membership to 37,000,000.

In May Mr. Ewing called a National Health Assembly to get some advice from physicians and other experts. The first group was conspicuously lacking in the number of physicians invited. After considerable public criticism, the number of physicians invited was increased, but not to the extent that their knowledge of the field merited. The assembly was held. There are conflicting reports concerning the value of the meeting. The assembly agreed that the United States needs more health insurance but could not decide upon the type. Yet Mr. Ewing, trained as a lawyer, suddenly becomes an expert in this difficult field and recommends a national compulsory health insurance program.

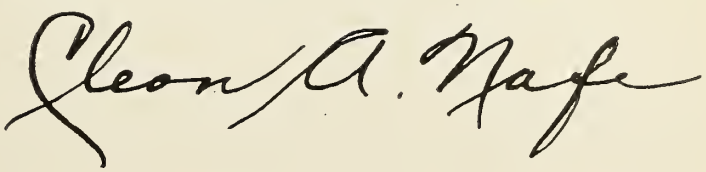
Could it be that politics in any way has influenced his decision? He cites statistics and debatable conclusions with reckless abandon as though they were facts. In these statistics can be seen the distorted compilations of accumulated data by the unreliable Isadore Falk, long-time advocate of socialized medicine and now the Director of Research and Statistics of the Social Security Board.

The medical profession has always chosen to remain bi-partisan. There are many fine physicians who have been lifelong Democrats and others who have adhered to the Republican party. It is impossible for the medical profession to remain neutral in such a radical recommendation as this. Physicians know that the best type of medical care can be furnished only when it is free of political influence and red tape.

There are many fine Democratic politicians who are staunch friends of the medical profession, but they must be told emphatically that the medical profession vigorously opposes this program of federal medicine, because the resulting type of medical care will be inferior in type, less obtainable, and so expensive that our government cannot stand the expense. Just as in other countries, physicians will lose interest in the better types of medical service, and resort to any method to secure a livelihood. Ambitious and able young men will not be attracted to the field of medicine and the supply of excellent physicians will shrink. The people will not like it, yet they will abuse the privilege and seek unnecessary medical services.

There seems little likelihood that compulsory health insurance will be adopted by the next government. Recent news items have stated that even Senators Murray and Pepper have lost interest in sponsoring this type of legislation. All polls indicate that Thomas E. Dewey will be our next President and he has definitely stated that he is opposed to compulsory health insurance. Yet it is imperative that every physician utilize his best efforts to see that our public officials are fully informed concerning the pitfalls of such a system.

But that is not enough. We must continue to improve our medical care program so that medical care and public health measures are so satisfactorily given to the people of our state that any suggestion that there be a change will be met by an overwhelming popular disapproval of such a consideration.



Medical Panorama by the Associate Editor

THE DOCTORS' PLAN

Mutual Medical Insurance, Inc., completed its second year of activity last month. After its organization under the sponsorship of the Indiana State Medical Association, the first policies were written in September, 1946. Since then the plan has enjoyed the support of a wide variety of public groups, including labor, farmers, and industry.

The response of the public to this means of providing prepaid obstetrical and surgical benefits on a voluntary basis has been good. At present the membership is in excess of 200,000 persons. New policies are being written on groups of industrial employees, farm organizations, and community groups, throughout the state. A steady and healthful growth has been characteristic of The Doctors' Plan since its inception. Public interest and public participation have increased with the success of its operations. As it rounds its second anniversary the Board of Directors and Officers are encouraged by the many indications of public acceptance. It is evident that the plan is performing well its function of alleviating the financial burden of expensive or sudden illness.

Financial integrity is one of the most important features of a plan which is devoted to public service. Adequate reserves for the inauguration of The Doctors' Plan were provided by money advanced by the physicians of Indiana. One of the milestones which manifests the sound fiscal condition of the corporation was the repayment of these funds during the month of February, 1948.

Another evidence of its sound condition was the adoption of a new fee schedule in April, 1948. This change was based on trustworthy actuarial experience, and broadened considerably the coverage which is afforded its members.

The accumulation of an adequate reserve is an absolute necessity, in order to provide for the possibility of unpredictable and unusual experience in claims. However, the real test of worth of such a company lies not in the size of its reserves, but in the amount of money which is paid on behalf of its members to doctors, and also in the percentage of total income which is devoted to operating expenses.

In the first two years of operation Mutual Medical Insurance has paid the doctors of Indiana the sum of $935,806.00.

At present the operating expense is approximately 15 percent of total income. This item is on the decrease and is considered to be well within the range to be expected for a developing company during the second year. With continued growth operating economies will be made possible due to size. Operating expenses will probably be reduced in the future to between 10 percent and 12 percent.

There can be no doubt that prepaid voluntary medical care plans are satisfying a great public need. There are now similar plans either in operation or about to be inaugurated in 46 states. All are organized as nonprofit companies and are sponsored by the medical profession. They are represented as a group by Associated Medical Care Plans, and have adopted the term "Blue Shield" as a distinguishing symbol. Most of them have been developed in close association with and with the cooperation of the Blue Cross plans, which entered the field of hospital service at an earlier date to ease the burden of the cost of hospital care.

The latest data available indicate that a total of 8,500,000 individuals in the United States are protected by this type of insurance. The different associations have varied in their annual rates of growth, but all have been distinguished by immediate acceptance on the part of the public. All the plans, whether large or small, whether organized for urban centers or for rural areas, have demonstrated their ability to pay satisfactory fees to the profession, and to operate on a financially sound basis, on premiums which their members can afford to pay.

The most potent argument which has been advanced in favor of compulsory government-controlled health insurance is that it will spread the cost of medical care, and thereby provide medical service for all citizens regardless of economic status. The nation-wide response to the voluntary health plans indicates the existence of an almost universal desire for the financing of medical care by some prepaid plan. The Doctors' Plan and other Blue Shield organizations, therefore, are the medical profession's answer to this demand. The continued growth and development of such plans, and the orderly and well-advised broadening of their coverage, constitutes the most effective activity in which physicians may engage to lessen the threat of compulsory insurance.

NINETY-NINTH

Annual Session

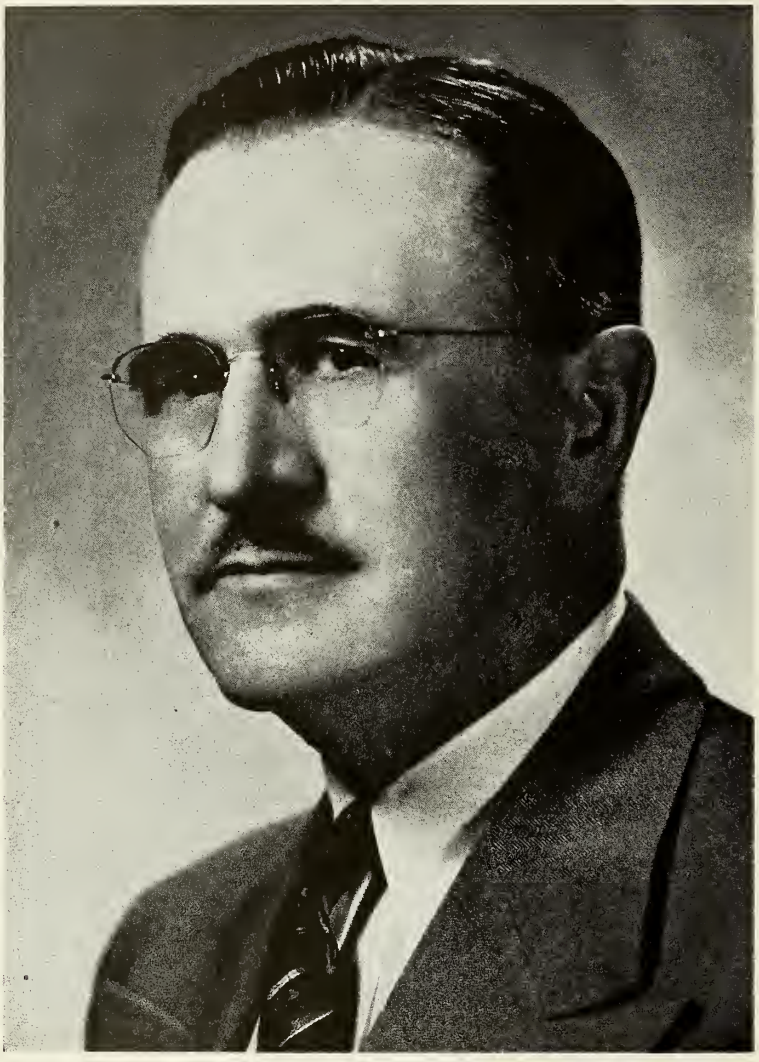
INDIANA STATE MEDICAL ASSOCIATION

Indianapolis, Iudiana

October 26, 27 and 28, 1948

Headquarters — Murat Temple

Complete Program on following pages



CLEON A. NAFE, M.D.

Indianapolis

PRESIDENT

INDIANA STATE MEDICAL ASSOCIATION

1948

INDIANA STATE MEDICAL ASSOCIATION

Officers - 1948



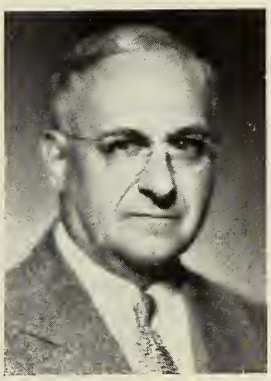
A. P. HAUSS
President-Elect
New Albany



A. F. WEYERBACHER
Treasurer
Indianapolis



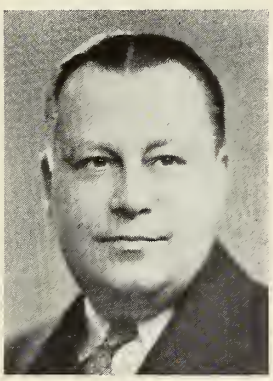
ALFRED ELLISON
Chairman of Council
South Bend



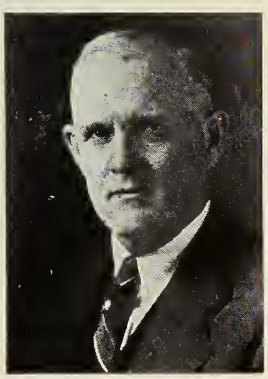
E. M. SHANKLIN
Editor, THE JOURNAL
Hammond



FRANK B. RAMSEY
Associate Editor
THE JOURNAL
Indianapolis



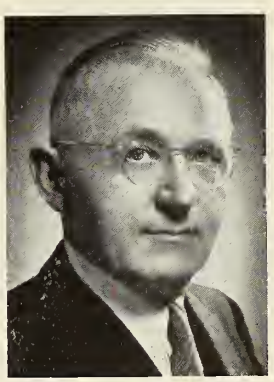
RAY E. SMITH
Executive Secretary and
Managing Editor of
THE JOURNAL
Indianapolis



C. H. McCASKEY
Chairman
Executive Committee
Indianapolis



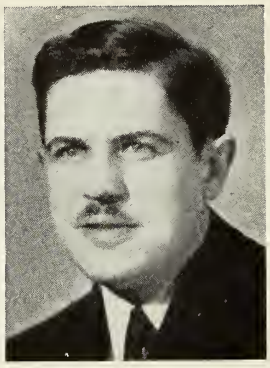
W. L. PORTTEUS
Executive Committee
Franklin



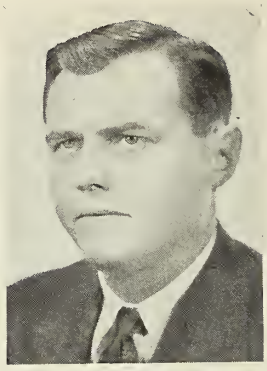
BERT E. ELLIS
Chairman
Convention Arrangements
Indianapolis



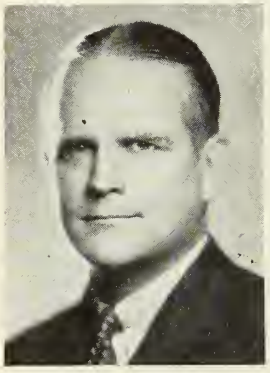
DUDLEY PFAFF
Chairman
Section on Obstetrics and Gynecology
Indianapolis



E. F. BOGGS
Chairman
Section on General Practice
Indianapolis



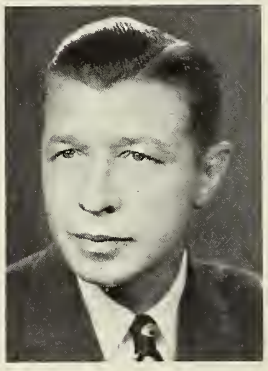
M. E. GLOCK
Chairman
Section on Medicine
Fort Wayne



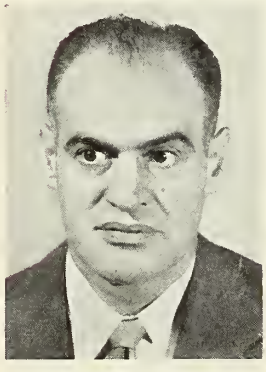
W. N. WISHARD, JR.
Chairman
Section on Surgery
Indianapolis



MRS. WILLIAM MORRISON
President of the Woman's Auxiliary to the Indiana State Medical Association
Kokomo



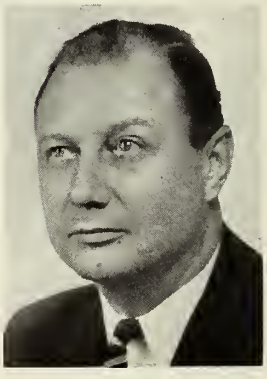
R. J. McQUISTON
Chairman
Section on Ophthalmology and Otolaryngology
Indianapolis



PAUL J. FOUTS
Secretary
Section on Medicine
Indianapolis

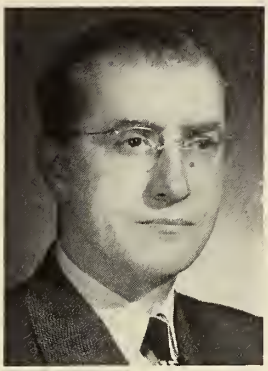


H. C. WALLACE
Secretary
Section on Surgery
Crawfordsville



LESTER D. BIBLER
Secretary
Section on General Practice
Indianapolis

(Photo of W. H. Lane, M.D., of South Bend, Chairman, Section on Anesthesia, not received.)



R. P. GOOD
Secretary
Section on Ophthalmology
and Otolaryngology
Kokomo



E. L. ENGEL
Secretary
Section on Obstetrics
and Gynecology
Evansville



WILLIAM B. ADAMS
Secretary
Section on Anesthesia
Muncie



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Editorial Board
Evansville



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Indianapolis



F. R. N. CARTER
Editorial Board
South Bend



LALL MONTGOMERY
Editorial Board
Muncie



EUGENE L. BULSON
Editorial Board
Fort Wayne

Out-of-State Guest Speakers



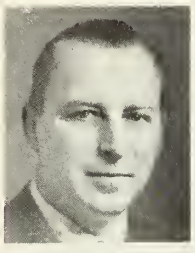
IRVING S. WRIGHT, M.D.
Clinical Professor of Medicine, New York Postgraduate Medical School and Hospital, Columbia University, New York



HERBERT E. SCHMITZ, M.D.
Professor of Obstetrics and Gynecology, Loyola University School of Medicine Chicago



ISIDOR S. RAVDIN, M.D.,
Professor of Surgery, University of Pennsylvania Medical School, and Medico-Chirurgical College Graduate School of Medicine, University of Pennsylvania, Philadelphia



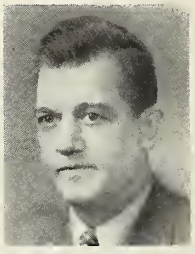
RALPH M. TOVELL, M.D.
Chief, Department of Anesthesiology, Hartford Hospital, Hartford, Conn.



WINGATE M. JOHNSON, M.D.,
Editor, North Carolina Medical Journal, Winston-Salem, N. C.



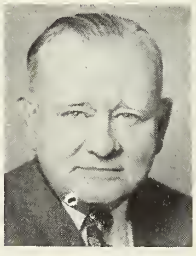
EARL D. McBRIDE, M.D.,
Assistant Professor of Orthopedic Surgery, University of Oklahoma School of Medicine, Oklahoma City



EUGENE B. FERRIS, M.D.,
Assistant Professor of Medicine, University of Cincinnati College of Medicine, Cincinnati



WILLIAM K. KELLER, M.D.,
Assistant Professor of Psychiatry, University of Louisville School of Medicine, Louisville



PAUL R. HAWLEY, M.D.,
Chief Executive Officer, Associated Medical Care Plans, Chicago



JOHN M. McLEAN, M.D.,
Associate Professor of Clinical Surgery, Cornell University Medical College, New York City



HUGH R. BUTT, M.D.,
Mayo Clinic, Rochester, Minn.



ALBERT D. KAISER, M.D.,
Associate Professor of Pediatrics, University of Rochester School of Medicine, Rochester, N. Y.



AUSTIN M. BRUES, M.D.,
Director, Biology Division, Argonne National Laboratory, Chicago



ARCHIE L. DEAN, M.D.,
Assistant Professor of Clinical Surgery, Cornell University Medical College, New York City



ARTHUR C. CURTIS, M.D.,
Professor of Dermato-Syphilology, University of Michigan Medical School, Ann Arbor

Official Program

Ninety-ninth Annual Session
INDIANA STATE MEDICAL ASSOCIATION
Murat Temple
Indianapolis, Indiana
October 26, 27 and 28, 1948

Monday, October 25, 1948

Annual Indiana Health Officers' Conference.

6:30 p.m. Executive Committee dinner and meeting, Columbia Club.

Tuesday, October 26, 1948

Morning

8:00 a.m. Registration starts, lounge room, Murat Temple.

8:00 a.m. Opening of scientific and technical exhibits, lounge room, Murat Temple.

10:00 a.m. Annual golf tournament. Medal play, based on low gross and handicap. Broadmoor Country Club.

11:00 a.m. Instructional courses, Egyptian Room, Murat Temple.

11:00 a.m. Editorial Board meeting, Officers' Room, Murat Temple.

12:00 m. Annual trap and skeet shoot, Indiana Gun Club.

Afternoon

12:30 p.m. Council meeting, Dining Room, Murat Temple.

1 to 5 p.m. Instructional courses, Egyptian Room, Murat Temple.

4:00 p.m. Meeting of House of Delegates, Murat Theater. (All association members are welcome.)

Evening

6:30 p.m. Annual dinner meeting for women physicians, Athenaeum.

7:00 p.m. Buffet supper, smoker and stag party, Recreation Room, Murat Temple. Award of golf, trap and skeet shoot prizes. (Dining room open at 6:00 p.m. Tickets $1.00.)

8:30 p.m. Theater party, Murat Theater.

Wednesday, October 27, 1948

7:30 a.m. Breakfast meeting of members of the State and County Conservation of Vision Committees, Parlors D and E, Indianapolis Athletic Club.

Speaker: JOHN MILTON McLEAN, M.D., Associate Professor of Clinical Surgery (Ophthalmology), Cornell University Medical College, New York, N. Y.

7:30 a.m. Breakfast meeting of Committee on Secretaries' Conference, Hotel Lincoln.

8:00 a.m. Registration continues, lounge room, Murat Temple.

8:00 a.m. Scientific and technical exhibits, lounge room, Murat Temple.

GENERAL MEETING

MURAT THEATER

9:30 a.m. Call to order by Cleon A. Nafe, M.D., Indianapolis, president, Indiana State Medical Association.

9:30 a.m. Greetings by Bert E. Ellis, M.D., Indianapolis, president of the Indianapolis Medical Society, and chairman of Committee on Convention Arrangements.

9:35 a.m. RANSOM R. BUCHHOLZ, M.D., Evansville.
Subject: *"Carcinoma of the Breast."*

9:55 a.m. EUGENE B. FERRIS, M.D., Assistant Professor of Medicine, University of Cincinnati, College of Medicine, Cincinnati.
Subject: *"The Evaluation and Management of Hypertension."*

10:20 a.m. President's address, CLEON A. NAFE, M.D., Indianapolis.

10:45 a.m. Five-minute intermission.

10:50 a.m. JOHN MILTON McLEAN, M.D., New York, N. Y.
Subject: *"Present Status of Corneal Grafting."*

(Wednesday, October 27, 1948)

11:15 a.m. MICHAEL SHELLHOUSE, M.D., Gary.
Subject: *"Problems Commonly Met in Office Gynecology."*

11:35 a.m. ARTHUR C. CURTIS, M.D., Professor of Dermato-Syphilology, University of Michigan Medical School, Ann Arbor, Michigan.
Subject: *"The Enigma of Sarcoidosis."*

Noon

12:00 m. Phi Beta Pi Alumni Association luncheon meeting, East Room, Athenaeum.

12:15 p.m. Luncheon meeting of Committee on Mental Health, Parlor D, Indianapolis Athletic Club.

12:15 p.m. Luncheon meeting of members of State and County Tuberculosis Committees, Dining Room, Murat Temple. Indiana Chapter of American College of Chest Physicians participating.

Speakers:

ROBERT G. BLOCH, M.D., Associate Professor of Medicine, University of Chicago, The School of Medicine, Chicago, Illinois.
Subject: *"A Resumé of the Present Concept of Sarcoidosis."*

Lantern slides.

BENJAMIN L. BROCK, M.D., Veterans Administration, Chicago, Illinois.

Subject: *"A Summary of the Results of Streptomycin Therapy in Veterans Hospitals."*

X-ray conference.

12:30 p.m. Luncheon and business meeting, Indiana Association of Pathologists, Empire Room, Claypool Hotel.

12:30 p.m. Luncheon meeting of Committee on Industrial Health, Palm Room, Athenaeum.

Afternoon

1:00 p.m. Time allowed to view scientific and technical exhibits.

GENERAL MEETING

EGYPTIAN ROOM

2:00 p.m. MILO K. MILLER, M.D., South Bend.
Subject: *"Chemotherapy in Pediatrics with Some Do's and Don'ts."*

2:20 p.m. RALPH MOORE TOVELL, M.D., Hartford, Connecticut.
Subject: *"Role of Analgesics and Anesthetics in the Production of Asphyxia Neonatorum."*

2:45 p.m. RICHARD H. APPEL, M.D., Indianapolis.
Subject: *"Office Proctology."*

3:05 p.m. Ten-minute intermission.

3:15 p.m. WINGATE MEMORY JOHNSON, M.D., Winston-Salem, North Carolina.
Subject: *"Need for Recognition of General Practice."*

3:40 p.m. HERBERT EUGENE SCHMITZ, M.D., Professor of Obstetrics and Gynecology, Loyola University School of Medicine, Chicago, Illinois.
Subject: *"Carcinoma of the Uterus."*

4:05 p.m. EARL DUWAIN McBRIDE, M.D., Assistant Professor of Orthopedic Surgery, University of Oklahoma School of Medicine, Oklahoma City, Oklahoma.
Subject: *"Disability Evaluation."*

4:30 p.m. Section meetings, to elect section officers for 1949.

Surgical Section, Egyptian Room A.

Medical Section, Egyptian Room.

Ophthalmology and Otolaryngology, Egyptian Room E.

Anesthesia, Egyptian Room B.

General Practice, Egyptian Room C.

Obstetrics and Gynecology, Egyptian Room D.

4:45 p.m. Time allowed to view scientific and technical exhibits.

Evening

6:00 p.m. Dinner, sponsored by Indiana Academy of General Practice, for all physicians and their wives, Athenaeum. $4.00 per plate.
Speaker: WINGATE MEMORY JOHNSON, M.D., Winston-Salem, North Carolina.

Indiana State Pediatric Society organization dinner meeting.

Thursday, October 28, 1948

8:00 a.m. Registration continues, lounge room, Murat Temple.

8:00 a.m. Scientific and technical exhibits, lounge room, Murat Temple.

GENERAL MEETING

MURAT THEATER

9:30 a.m. CARL H. McCASKEY, M.D., Indianapolis.
Subject: *"The Significance of Hoarseness."*

9:50 a.m. HUGH R. BUTT, M.D., Rochester, Minnesota.
Subject: *"Present-Day Status of Tests of Hepatic Function."*

(Thursday, October 28, 1948)

10:15 a.m. WILLIAM KARL KELLER, M.D., Assistant Professor of Psychiatry, University of Louisville School of Medicine, Louisville, Kentucky.
Subject: *"Observation."*

10:40 a.m. Ten-minute intermission.

10:50 a.m. ISIDOR S. RAVDIN, M.D., George Leib Harrison Professor of Surgery, University of Pennsylvania School of Medicine, and Harrison Professor of Surgery, The Medico-Chirurgical College, Graduate School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania.
Subject: *"Vagotomy."*

11:15 a.m. GERALD W. GUSTAFSON, M.D., Indianapolis.
Subject: *"The Management of Breech Presentation."*

11:35 a.m. PAUL R. HAWLEY, M.D., Chief Executive Officer, Associated Medical Care Plans, Chicago, Illinois.
Subject: *"Blue Shield Is the Doctor's Plan."*

11:55 a.m. Question and answer period.

11:55 a.m. Final meeting of the House of Delegates, Dining Room, Murat Temple. Annual election of officers and selection of convention city for 1950. (All association members are welcome.)
Meeting of Council immediately following adjournment of House of Delegates.

Noon

12:00 m. Reunion luncheon of 1923 class of Indiana University School of Medicine, Directors' Room, Athenaeum.

12:30 p.m. Luncheon meeting, Indiana Roentgen Society, Blue Room, Athenaeum.
Speaker: AUSTIN M. BRUES, M.D., Director, Biology Division, Argonne National Laboratory, Chicago, Illinois.
Seminar on Radiobiology

Afternoon

2:00 p.m. JOSEPH H. CLEVENGER, M.D., Muncie.
Subject: *"Differential Diagnosis of Acute Surgical Abdomen in General Practice."*

2:20 p.m. ROLLIN H. MOSER, M.D., Indianapolis.
Subject: *"Syndromes of Abdominal Pain of Medical Origin Simulating Acute Surgical Conditions."*

2:40 p.m. ARCHIE LEIGH DEAN, M.D., Assistant Professor of Clinical Surgery (Urology), Cornell University Medical College, New York, N. Y.
Subject: *"Cancer of the Genito-Urinary Tract."*

3:05 p.m. Ten-minute intermission.

3:15 p.m. IRVING SHERWOOD WRIGHT, M.D., Clinical Professor of Medicine, New York Postgraduate Medical School and Hospital, Columbia University, New York, N. Y.
Subject: *"The Use of Anticoagulants in the Treatment of Diseases of the Heart and Blood Vessels."*

3:40 p.m. ALBERT DAVID KAISER, M.D., Associate Professor of Pediatrics, University of Rochester School of Medicine, Rochester, N. Y.
Subject: *"Virus Infections in Children."*

4:05 p.m. AUSTIN M. BRUES, M.D., Chicago, Illinois.
Subject: *"Medical Aspects of Atomic Radiation."*

4:30 p.m. Adjournment.

Evening

6:30 p.m. Annual dinner, Egyptian Room, Murat Temple.

Presiding officer, CLEON A. NAFE, M.D., president, Indiana State Medical Association.

Presentation of certificate of merit to FLOYD T. ROMBERGER, M.D., president 1947, by Cleon A. Nafe, M.D.

Presentation of Fifty-Year Club Pins and Certificates.

Award to General Practitioner of the Year.

Speaker: ERNEST E. IRONS, M.D., Chicago, President-elect, American Medical Association.

Subject: *"Socialism, Medicine and Economics."*

Entertainment: REVEREND LAURENCE HALL, Cincinnati.



Rev. Laurence Hall
Cincinnati



Ernest E. Irons, M.D.
Chicago

Women's Entertainment

Tuesday, October 26, 1948

8:00 a.m. Registration starts, lounge room, Murat Temple.

8:30 p.m. Theater party for physicians and wives and guests, Murat Theater.

Wednesday, October 27, 1948

8:00 a.m. Registration continues, lounge room, Murat Temple.

10:30 a.m. Board meeting, Woman's Auxiliary to the Indiana State Medical Association, Green Room, Indianapolis Athletic Club.

2 to 5 p.m. Autumn tea at the Governor's Mansion.

Thursday, October 28, 1948

8:00 a.m. Registration continues, lounge room, Murat Temple.

11:30 a.m. School of Instruction, Green Room, Indianapolis Athletic Club.

1. Parliamentary law.
2. Organization.
3. Public Relations.
4. Legislation.
5. Radio.

1:00 p.m. Luncheon honoring Mrs. Luther H. Kice, Garden City, New York, president, Woman's Auxiliary to the American Medical Association, followed by bridge, Ball Room, Indianapolis Athletic Club.

6:30 p.m. Annual dinner in conjunction with the Indiana State Medical Association, Egyptian Room, Murat Temple.

COMMITTEES ON CONVENTION ARRANGEMENTS

SMOKER AND STAG: Chairman, Clifford E. Cox; J. Neill Garber, Joseph W. Wright, Jr., Dan E. Talbott, Albert M. Donato.

FINANCE: Chairman, Caryle B. Bohner; Paul K. Cullen, Kenneth L. Craft, Myron S. Harding, Paul G. Iske.

LANTERN: Chairman, Lester H. Hoyt; Donald J. Caseley, J. L. Arbogast, J. C. Travis, Clifford C. Taylor.

ENTERTAINMENT: Chairman, Walter P. Moenning; Hubert L. Collins, James M. Leffel, Jr., Reid L. Keenan, W. Burleigh Matthew.

MILITARY SERVICE: Chairman, Roy A. Geider; James H. Hawk, Sidney A. Kauffman, Edmund B. Haggard, Herbert L. Egbert.

WOMEN PHYSICIAN: Chairman, Martha C. Souter; Frances T. Brown, Laura Hare, Mary Alice Norris, Jane M. Ketcham.

RADIO: Chairman, Donald E. Wood; C. A. Stayton, Sr., Dudley A. Pfaff, John E. Dalton, Frank M. Gastineau.

FRATERNITY AND CLASS: Chairman, Okla W. Sicks; James S. McBride, Allan K. Harcourt.

PUBLICITY: Chairman, E. Vernon Hahn; John H. Greist, William M. Dugan, Cyrus J. Clark, Bernard D. Rosenak.

GOLF: Chairman, Edwin W. Dyar; James S. Browning, Joseph E. Walther, Laverne B. Hurt, Thomas W. Johnson.

RECEPTION: Chairman, Roy V. Myers; Clark W. Day, Walter F. Kelly, Don D. Bowers, Ted L. Grisell, Henry S. Leonard, William M. Kelly, Emmett B. Lamb, Thomas B. Noble, Jr., Irvin Caplin, Joseph A. Shugart, John M. Whitehead, Roy L. Smith, William D. Gambill, David F. Stone, Donald W. Brodie, F. T. Romberger, Jr.

TRAP SHOOTING: Chairman, Horace M. Banks; Rollin H. Moser, Harold C. Adkins.

Scientific Exhibit

J. L. Arbogast, M.D., Indianapolis, Chairman
James N. Collins, M.D., Indianapolis,
Kenneth G. Kohlstaedt, M.D., Indianapolis
Carl S. Culbertson, M.D., South Bend
A. W. Ratcliffe, M.D., Evansville

Murat Temple

1. **Sludged Blood.**
   Melvin Knisely, M.D.
2. **Diabetes in 1948.**
   Indianapolis Clinical Diabetes Society
   F. B. Peck, M.D.
3. **Committee on Tuberculosis—Indiana State Medical Association.**
   Indiana Chapter, American College of Chest Physicians
4. **Mumps Virus.**
   Doctors H. M. Powell, Hascall H. Muntz and C. G. Culbertson
5. **Indiana Tumor Registry.**
   Indiana Association of Pathologists
   Indiana State Board of Health
6. **National Society for Crippled Children and Adults.**
   Indiana Society for Crippled Children, Inc.
7. **Problems in Tuberculosis and X-Ray Results.**
   Indiana Tuberculosis Association
8. **Oxygen Humidifier.**
   Children's Hospital of Pittsburgh
   Thomas O. Middleton, M.D.
9. **The General Practitioner and the Cancer Patient.**
   Indiana Cancer Society, Inc.
10. **Indiana State Board of Health—Services to Physicians.**
    Indiana State Board of Health
11. **Indiana Heart Foundation, Inc.**
    Indiana Heart Foundation, Inc.
12. **Production of Penicillin.**
    Indiana Pharmaceutical Association
13. **The Physician and the Pharmacist.**
    Indiana Pharmaceutical Association
14. **Blue Cross and Medical Care Plan.**
15. **Ten Point Program of the American Medical Association.**
    American Medical Association (33)
16. **Therapeutic Highlights: Past, Present and Future.**
    American Medical Association (42)
17. **Modern Therapy.**
    American Medical Association (43)
18. **Medical Aspects of Atomic Energy.**
    American Medical Association (54)
19. **Prevention of Malpractice.**
    American Medical Association (67)
20. **Health Education in the Doctor's Office.**
    American Medical Association (69)
21. **Serums and Vaccines in Communicable Diseases.**
    American Medical Association (44)
22. **Medical Examinations of School Children.**
    American Medical Association (61)
23. **Rural Child Health.**
    American Medical Association (79)
24. **Medical Service.**
    American Medical Association (86)
25. **Common Superficial Fungus Diseases.**
    Department of Dermatology and Syphilology
    Indianapolis General Hospital
26. **Iliac Bone Marrow Puncture.**
    Indiana University Medical Center
27. **Common Duct Stones.**
    Caylor-Nickel Clinic

DATA FROM PREVIOUS SESSIONS

Year	Session	Place	Registration	Year	Session	Place	Registration
1908	59th	French Lick	312	1928	79th	Gary	892
1909	60th	Terre Haute	421	1929	80th	Evansville	814
1910	61st	Fort Wayne	450	1930	81st	Fort Wayne	1,115
1911	62nd	Indianapolis	748	1931	82nd	Indianapolis	1,033
1912	63rd	Indianapolis	590	1932	83rd	Michigan City	904
1913	64th	West Baden	312	1933	84th	French Lick	637
1914	65th	Lafayette	527	1934	85th	Indianapolis	1,814
1915	66th	Indianapolis	646	1935	86th	Gary	1,011
1916	67th	Fort Wayne	381	1936	87th	South Bend	1,150
1917	68th	Evansville	270	1937	88th	French Lick	1,154
1918	69th	Indianapolis	388	1938	89th	Indianapolis	1,751
1919	70th	Indianapolis	---	1939	90th	Fort Wayne	1,332
1920	71st	South Bend	421	1940	91st	French Lick	1,064
1921	72nd	Indianapolis	550	1941	92nd	Indianapolis	1,890
1922	73rd	Muncie	522	1942	93rd	French Lick	706
1923	74th	Terre Haute	823	1943	94th	Indianapolis	1,323
1924	75th	Indianapolis	1,012	1944	95th	Indianapolis	1,584
1925	76th	Marion	800	1945	96th	French Lick	922
1926	77th	West Baden	900	1946	97th	Indianapolis	2,240
1927	78th	Indianapolis	1,500	1947	98th	French Lick	1,618

PRESIDENTS OF THE INDIANA STATE MEDICAL ASSOCIATION SINCE ITS ORGANIZATION

Name and Residence	Elected	Served
Medical Convention		
*Livingston Dunlap, Indianapolis	1849	1849
Medical Society		
*William T. S. Cornett, Versailles	1849	1850
*Ashahel Clapp, New Albany	1850	1851
*George W. Mears, Indianapolis	1851	1852
*Jeremiah H. Brower, Lawrenceburg	1852	1853
*Elizur H. Deming, Lafayette	1853	1854
*Madison J. Bray, Evansville	1854	1855
*William Lomax, Marion	1855	1856
*Daniel Meeker, LaPorte	1856	1857
*Talbot Bullard, Indianapolis	1857	1858
*Nathan Johnson, Cambridge City	1858	1859
*David Hutchinson, Mooresville	1859	1860
*Benjamin S. Woodworth, Fort Wayne	1860	1861
*Theophilus Parvin, Indianapolis	1861	1862
*James F. Hibberd, Richmond	1862	1863
*John Sloan, New Albany	1863	----
*John Moffett (acting), Rushville	1863	1864
*Samuel L. Linton, Columbus	1864	----
*Wilson Lockhart (acting), Danville	1864	1865
*Myron H. Harding, Lawrenceburg	1865	1866
*Vierling Kersey, Richmond	1866	1867
*John S. Bobbs, Indianapolis	1867	1868
*Nathaniel Field, Jeffersonville	1868	1869
*George Sutton, Aurora	1869	1870
*Robert N. Todd, Indianapolis	1870	1871
*Henry P. Ayres, Fort Wayne	1871	1872
*Joel Pennington, Milton	1872	1873
*Isaac Casselberry, Evansville	1873	----
*Wilson Hobbs (acting), Knightstown	1873	1874
*Richard E. Haughton, Richmond	1874	1875
*John H. Helm, Peru	1875	1876
*Samuel S. Boyd, Dublin	1876	1877
*Luther D. Waterman, Indianapolis	1877	1878
*Louis Humphreys, South Bend	1878	----
*Benj. Newland (acting), Bedford (v.p.)	1878	1879
*Jacob R. Weist, Richmond	1879	1880
*Thomas B. Harvey, Indianapolis	1880	1881
*Marshall Sexton, Rushville	1881	1882
*William H. Bell, Logansport	1882	1883
*Samuel E. Munford, Princeton	1883	1884
*James H. Woodburn, Indianapolis	1884	1885
*James S. Gregg, Fort Wayne	1885	1886
*General W. H. Kemper, Muncie	1886	1887
*Samuel H. Charlton, Seymour	1887	1888
*William H. Wishard, Indianapolis	1888	1889
*James D. Gatch, Lawrenceburg	1889	1890
*Gonsolvo C. Smythe, Greencastle	1890	1891
*Edwin Walker, Evansville	1891	1892
*George F. Beasley, Lafayette	1892	1893
*Charles A. Daugherty, South Bend	1893	1894
*Elijah S. Elder, Indianapolis	1894	----
Charles S. Bond (acting), Richmond	1894	1895
*Miles F. Porter, Fort Wayne	1895	1896
*James H. Ford, Wabash	1896	1897
*William N. Wishard, Indianapolis	1897	1898
*John C. Sexton, Rushville	1898	1899
*Walker Schell, Terre Haute	1899	1900
*George W. McCaskey, Fort Wayne	1900	1901
*Alembert W. Brayton, Indianapolis	1901	1902
*John B. Berteling, South Bend	1902	1903
Medical Association		
*Jonas Stewart, Anderson	1903	1904
*George T. MacCoy, Columbus	1904	1905
*George H. Grant, Richmond	1905	1906
*George J. Cook, Indianapolis	1906	1907
*David C. Peyton, Jeffersonville	1907	1908
*George D. Kahlo, French Lick	1908	1909
*Thomas C. Kennedy, Shelbyville	1909	1910
*Frederick C. Heath, Indianapolis	1910	1911
*William F. Howat, Hammond	1911	1912
*A. C. Kimberlin, Indianapolis	1912	1913
*John P. Salb, Jasper	1913	1914
*Frank B. Wynn, Indianapolis	1914	1915
*George F. Keiper, Lafayette	1915	1916
*John H. Oliver, Indianapolis	1916	1917
*Joseph Rilus Eastman, Indianapolis	1917	1918
William H. Stemm, North Vernon	1918	1919
*Charles H. McCully, Logansport	1919	1920
*David Ross, Indianapolis	1920	1921
William R. Davidson, Evansville	1921	1922
*Charles H. Good, Huntington	1922	1923
*Samuel E. Earp, Indianapolis	1923	1924
Eldridge M. Shanklin, Hammond	1924	1925
Charles N. Combs, Terre Haute	1925	1926
*Frank W. Cregor, Indianapolis	1926	1927
George R. Daniels, Marion	1926	1928
Charles E. Gillespie, Seymour	1927	1929
*Angus C. McDonald, Warsaw	1928	1930
Alois B. Graham, Indianapolis	1929	1931
Franklin S. Crockett, Lafayette	1930	1932
Joseph H. Weinstein, Terre Haute	1931	1933
Everett E. Padgett, Indianapolis	1932	1934
*Walter J. Leach, New Albany	1933	1935
Roscoe L. Sensenich, South Bend	1934	1936
*Edmund D. Clark, Indianapolis	1935	1937
Herman M. Baker, Evansville	1936	1938
Edmund M. Van Buskirk, Ft. Wayne	1937	1939
Carl R. Ruddell, Indianapolis	1938	1940
Albert M. Mitchell, Terre Haute	1939	1941
Maynard A. Austin, Anderson	1940	1942
Carl H. McCaskey, Indianapolis	1941	1943
Jacob T. Oliphant, Farmersburg	1942	1944
Neslen K. Forster, Hammond	1943	1945
Jesse E. Ferrell, Fortville	1944	1946
Floyd T. Romberger, Lafayette	1945	1947
Cleon A. Nafe, Indianapolis	1946	1948

*Deceased

ANNUAL CONFERENCE

INDIANA STATE BOARD OF HEALTH WITH LOCAL HEALTH OFFICERS

October 25 and 26, 1948

Hurty Hall, State Board of Health Building

MONDAY, OCTOBER 25

Presiding—L. E. Burney, M. D., Secretary
Indiana State Board of Health

Afternoon:

1:00- 2:00 Registration.

2:00- 2:15 "Welcome and General Remarks"—L. E. Burney, M. D.

2:15- 2:45 "Progress on Public Health Code"—F. R. N. Carter, M.D., Health Officer of South Bend.

2:45- 3:15 "Legislation of Indiana Advisory Health Council"—Murray A. Auerbach, Exec. Sec'y, Indiana Tuberculosis Association.

3:15- 3:30 "Vital Statistics as Public Records"—Robert Yoho, Director of Health Education, Records and Statistics, Indiana State Board of Health.

3:30- 4:15 General Discussion Regarding:
Progress in Local Health Units.
Progress in Hospital Construction.
Year's Review of Health in Indiana.
Cancer Program.
V. D.—New Policies.

4:15- 5:00 Business Session—Health Officers' Association.

INDIANA HEALTH OFFICERS' ANNUAL BANQUET

(Place to be announced at afternoon meeting)

MONDAY, OCTOBER 25

Evening:

6:30 Presiding—W. R. Taylor, M.D., President, Indiana Health Officers' Association.

"Public Health Today"—Herman N. Bundesen, M.D., President, Chicago Board of Health.

TUESDAY, OCTOBER 26

Presiding—W. R. Taylor, M.D.

Morning:

9:30 Report of Committee.

Election of Officers.

General Discussion.

Adjourn.

INDIANA STATE BOARD OF HEALTH BOARD MEMBERS

David R. Johns, M.D., Chairman
Howard Johnson, Vice-Chairman
Don E. Bloodgood, B.S.C.E., C.E.
Maynard K. Hine, D.D.S.
Mary Heckard, R.N.
Glen L. Jenkins, Ph.D.
R. C. Julien, D.V.M.
Jacob T. Oliphant, M.D.
James L. Wyatt, M.D.
L. E. Burney, M.D., Secretary

INDIANA HEALTH OFFICERS' ASSOCIATION

W. R. Taylor, M.D., President
J. W. Pahmeier, M.D., Vice-President
Claude Dollens, M. D., Secretary
Morris Balla, M.D., Treasurer

Announcements

Conservation of Vision Committee Breakfast

A breakfast meeting of members of the State and County Conservation of Vision Committees will be held in Parlors D and E, in the Indianapolis Athletic Club, at 7:30 a.m., on Wednesday, October 27, 1948.

Committee on Secretaries' Conference Breakfast

A breakfast meeting of the Committee on Secretaries' Conference will be held at 7:30 a.m., Wednesday, October 27, 1948, at the Hotel Lincoln.

Phi Beta Pi Alumni Luncheon

Phi Beta Pi Alumni Association will hold a luncheon meeting in the East Room at the Athenaeum, at 12:00 m. on Wednesday, October 27, 1948.

Committee on Mental Health Luncheon

A luncheon meeting of the Committee on Mental Health will be held in Parlor D at the Indianapolis Athletic Club at 12:15 p.m. on Wednesday, October 27, 1948.

County Tuberculosis Committees Luncheon

Members of State and County Tuberculosis Committees will hold a luncheon meeting at 12:15 p.m. on Wednesday, October 27, 1948, in the Dining Room of the Murat Temple. The Indiana Chapter of American College of Chest Physicians will also participate.

Indiana Association of Pathologists Luncheon

There will be a luncheon and business meeting of the Indiana Association of Pathologists in the Empire Room at the Claypool Hotel, at 12:30 p.m., Wednesday, October 27, 1948.

Committee on Industrial Health Luncheon

A luncheon meeting of the Committee on Industrial Health will be held at 12:30 p.m., Wednesday, October 27, 1948, in the Palm Room at the Athenaeum.

Dinner for Women Physicians

The annual dinner meeting for women physicians will be held at the Athenaeum, at 6:30 p.m., on Tuesday, October 26, 1948.

Stag Party

A buffet supper, smoker and stag party is scheduled for 7:00 p.m., Tuesday, October 26, 1948, in the Recreation Room, Murat Temple. Awards of golf, trap and skeet shoot prizes will be made at this time. (Dining room open at 6:00 p.m. Tickets $1.00.)

1923 Class Reunion Luncheon

A reunion luncheon of the 1923 class of Indiana University School of Medicine will be held at 12:00 m., on Thursday, October 28, 1948, in the Directors' Room at the Athenaeum.

Indiana Roentgen Society Luncheon

The Indiana Roentgen Society will hold a luncheon meeting in the Blue Room at the Athenaeum at 12:30 p.m., Thursday, October 28, 1948.

Annual Dinner

The Annual Dinner will be held in the Egyptian Room of the Murat Temple at 6:30 p.m. on Thursday, October 28, 1948.

Indiana State Pediatric Society Dinner

The Indiana State Pediatric Society will hold an organization dinner Wednesday evening, October 27, 1948. The time and place of the dinner will be posted on the bulletin board at the convention.

1907 Class Reunion

There will be a meeting of the 1907 class of the Indiana Medical College. Notice of the time and place of the meeting will be posted on the bulletin board at the convention.

Editorial Board Meeting

A meeting of the Editorial Board of THE JOURNAL of the Indiana State Medical tAssociation will be held in the Officers' Room, Murat Temple, at 11:00 a.m., on Tuesday, October 26, 1948.

Indiana Academy of General Practice Dinner

At 6:00 p.m., Wednesday, October 27, 1948, there will be a dinner for all physicians and their wives, sponsored by the Indiana Academy of General Practice. ($4.00 per plate.)

Gamma Phi Zeta Alumni Luncheon

Gamma Phi Zeta Alumni are planning a luncheon Wednesday, October 27, 1948. If interested, please write immediately to Mrs. Byron Kilgore, 3351 N. Wallace, Indianapolis 18.

Theater Party for Men and Women

At 8:30 p.m., on Tuesday, October 26, 1948, there will be a vaudeville show for men and women at the Murat Theater. Don't miss it!

ORDER YOUR TICKETS FOR THE 1948 INSTRUCTIONAL COURSE NOW!

The schedule of classes for the 1948 Instructional Courses, offered as a feature of the Annual Session of the Indiana State Medical Association, at Murat Temple, Indianapolis, is now complete. All classes are on Tuesday, October 26, 1948.

Admission to each class will be by ticket, and not more than thirty will be admitted to any class. The cost is $1.00 per class with a maximum charge of $3.00 for three or more classes. Plan your course to include five classes. (And please note second choices.) Enclose your check made payable to "Instructional Course Committee." Do it now!

INSTRUCTIONAL COURSE SCHEDULE

All Classes in the Egyptian Room—On Second Floor

Hour	*Room A*	*Room B*	*Room C*	*Room D*	*Room E*	*Room F*
11:00 A.M.	The Psychological Management of Patients Course 1	Dysfunctions of the Thyroid Gland Course 2	Diagnosis and Treatment of Common Skin Diseases Course 3	The Uses of Sulfa, Penicillin and Streptomycin Course 4	Pediatrics and The General Practitioner Course 5	Differential Diagnosis and Conservative Care of Backache Course 6
NOON RECESS						
1:00 P.M.	Bedside and Office Diagnosis of Cardiac and Vascular Problems Course 7	The Status and Care of Allergic Conditions Course 8	The Diagnostic Aid of X-Ray Course 9	Office Management of Ano-Rectal Conditions Course 10	Obstetrical Emergencies Course 11	Orthopedics for Use in General Practice Course 12
2:00 P.M.	The Differential Diagnosis and Treatment of Headache Course 13	The Management of The Menopause Syndrome Course 14	Bedside and Office Diagnosis of Cardiac and Vascular Problems Course 15	Office Diagnosis and Treatment of Common Genito-urinary Conditions Course 16	Infant Feeding Problems Course 17	Local and Short General Anesthesias in General Practice Course 18
3:00 P.M.	The Demonstration of a Physical Diagnostic Examination Course 19	The Problems of Hypertension Course 20	Impotence and Infertility Course 21	Diagnosis and Treatment of Common Skin Diseases Course 22	The Treatment of Colitis and Constipation Course 23	The Management of Diabetes Mellitus Course 24
4:00 P.M.	The Demonstration of a Diagnostic Neurological Examination Course 25	The Management of Problems of The Elderly Course 26	The Diagnosis and Management of Common Gynecological Conditions Course 27	The Diagnosis and Treatment of Common Eye Affections Course 28	The Problems in Management of Rheumatic Fever Course 29	Common Problems in Ear, Nose and Throat Conditions Course 30

Cut on Dotted Line

APPLICATION BLANK

Instructional Course Committee,
c/o Gordon W. Batman, M.D.,
723 Hume Mansur Building,
Indianapolis 4, Indiana.

Enclosed find check for $1:00; $2.00; $3.00. Please reserve tickets for the following Instructional Courses:

	11:00 A.M.	1:00 P.M.	2:00 P.M.	3:00 P.M.	4:00 P.M.
First choice	No.:	No.:	No.:	No.:	No.:
Second choice	No.:	No.:	No.:	No.:	No.:

(Insert Course Numbers plainly, please.)

Your tickets will be waiting for you at the Registration Desk, October 26, 1948.

Signed: ..... M.D.

Address: .....



Don't Delay Another Day!
Write NOW for Hotel
Reservations for the
1948 State Meeting!

In Indianapolis

October 26-27-28, 1948

Tuesday night, October 26—Stag party and entertainment

Wednesday, October 27—Scientific meetings all day

Thursday, October 28—Scientific meetings and annual banquet at night

Mail Coupon Below Direct to Hotel of Your Choice

Hotels and Locations	Single Rooms	Double Rooms	Double Twin Beds
ANTLERS, 750 N. Meridian St.	$3.50 up	$5.50 up	$7.50 up
CLAYPOOL, 14 N. Illinois St.	$3.00-$6.00	$5.00- $8.00	$6.00- $9.00
ENGLISH, Monument Circle	$1.75-$3.50	$3.00- $6.00	$5.00- $6.00
HARRISON, 51 N. Capitol Ave.	$3.25-$6.00	$4.75- $7.75	$6.50- $8.25
LINCOLN, 117 W. Washington St.	$3.50-$6.50	$5.00- $8.50	$7.00- $8.50
MAROTT, 2625 N. Meridian St.	$4.00-$6.00	$6.50-$10.00	$6.50- $9.00
SEVERIN, 201 S. Illinois St.	$3.00-$5.00	$4.50- $7.00	$6.50-$10.00
SPINK-ARMS, 410 N. Meridian St.	$3.00-$6.00	$5.00-$12.00	$5.50-$12.00
WARREN, 123 S. Illinois St.	$3.25-$6.00	$4.50- $7.50	$6.50- $8.25
WASHINGTON, 34 E. Washington St.	$3.00-$5.00	$4.50- $6.50	$6.00- $8.50

HOTEL RESERVATION BLANK
Clip and Mail this coupon to hotel

Manager .....Hotel, Indianapolis, Indiana

You are requested to reserve the following accommodations during the period of the Annual Meeting of the Indiana State Medical Association, October 26, 27 and 28, or for such other period as may be indicated herein.

☐ Single Room with bath ☐ Double Room with bath Price:.....

☐ Twin Bed Room with bath ☐ Suite

Arriving about .....A. M. .....P. M.

PLEASE VERIFY MY RESERVATION

Name.....

Address.....

.....

OFFICIAL CALL TO THE HOUSE OF DELEGATES

The next annual session of the Indiana State Medical Association will be held at Indianapolis, October 26, 27, and 28, 1948.

The House of Delegates will be constituted as follows: Marion County, seventeen delegates; Lake County, six delegates; Allen County, four delegates; St. Joseph County, four delegates; Vanderburgh County, four delegates; Delaware-Blackford, three delegates; Daviess-Martin, Dearborn Ohio, Elkhart, Fayette-Franklin, Fountain-Warren, Jasper-Newton, Madison, Owen-Monroe, Parke-Vermillion, Tippecanoe, Vigo, and Wayne-Union County societies, each two delegates; the other sixty-four county societies, each one delegate; thirteen councilors; and the ex-presidents, namely: C. S. Bond, W. H. Stemm, William R. Davidson, E. M. Shanklin, Charles N. Combs, George R. Daniels, Charles E. Gillespie, F. S. Crockett, J. H. Weinstein, E. E. Padgett, R. L. Sensenich, Herman M. Baker, E. M. VanBuskirk, Karl R. Ruddell, A. M. Mitchell, M. A. Austin, Carl H. McCaskey, J. T. Oliphant, N. K. Forster, J. E. Ferrel, and Floyd T. Romberger; and ex-officio, the president, president-elect, executive secretary, and the treasurer of the association, and the delegates to the American Medical Association, all without power to vote, except in case of a tie vote, when the president shall cast the deciding vote.

Blank credentials have been sent by the secretary to each county society, and the properly executed credentials should be mailed to Ray E. Smith, 1021 Hume Mansur Building, Indianapolis 4, or brought to the session. No delegate will be seated unless wearing the official badge.

The House of Delegates will convene promptly at 4:00 p.m., Tuesday, October 26, in the Murat Theater, Indianapolis, and again at 11:55 a.m., Thursday, October 28, in the Dining Room, Murat Temple. (Luncheon meeting.)

The order of business will be as follows:

1. Call to order by the president.
2. Roll call and seating of qualified delegates.
3. Reading of the minutes of previous meetings.
4. Appointment of reference committees.
5. Address of president-elect.
6. Report of executive secretary.
7. Report of the treasurer.
8. Report of the chairman of the Council.
9. Reports of councilors.
10. Reports of standing and special committees:
    - (1) Executive Committee.
    - (2) Arrangements.
    - (3) Scientific Work.
    - (4) Public Policy and Legislation.
    - (5) Publicity.
    - (6) Industrial and Civic Relationship.
    - (7) Medical Education and Hospitals.
    - (8) Public Relations.
    - (9) Auditing.
    - (10) Cancer.
    - (11) Centennial Celebration and History.
    - (12) Conservation of Vision.
    - (13) Constitution and By-Laws.
    - (14) Crippled Children Services.
    - (15) Hard of Hearing.
    - (16) Heart Disease.
    - (17) Indiana Inter-Professional Health Council.
    - (18) Indigent Medical Care.
    - (19) Industrial Health.
    - (20) Infantile Paralysis.
    - (21) Instructional Courses.
    - (22) Maternal and Child Health.
    - (23) Medical and Nursing School Scholarships.
    - (24) Mental Health.
    - (25) Necrology.
    - (26) Rural Medical Care.
    - (27) School Health and Physical Education.
    - (28) Scientific Exhibit.
    - (29) Secretaries' Conference.
    - (30) State Fair.
    - (31) Traffic Safety.
    - (32) Tuberculosis.
    - (33) Venereal Disease.
    - (34) Veterans Affairs and Rehabilitation.
    - (35) Journal Publication.

The election of officers will be the first order of business at the second meeting of the House of Delegates. In addition to the regular officers, the terms of the following officers expire December 31, 1948, and their successors must be elected at the session: Delegates to the American Medical Association to succeed H. G. Hamer, Indianapolis, and A. S. Giordano, South Bend; and alternates, Karl R. Ruddell, Indianapolis, and E. S. Jones, Hammond.

Delegates from the second, fifth, eighth, and eleventh districts are reminded that the terms of their councilors will expire December 31, 1948, and new councilors should be elected to succeed the following:

Second District: James H. Crowder, Sullivan.
Fifth District: A. M. Mitchell, Terre Haute.
Eighth District: E. H. Clauser, Muncie.
Eleventh District: C. S. Black, Warren.

Some of these elections already may have been held, but they should be reported to the House of Delegates at this session for confirmation.

RAY E. SMITH,
Executive Secretary.

Reports of Officers and Committees

EXECUTIVE SECRETARY

House of Delegates,
Indiana State Medical Association.

Gentlemen:

As another annual session of the state medical association approaches, it becomes the duty of the executive secretary to give an accounting of his stewardship. In some ways this is a difficult assignment, for most activities of the executive secretary are interrelated with the work of the thirty-five committees and cannot be separated.

It can be said honestly, and without fear of contradiction, that the past year (the last five months of Dr. Romberger's administration and the first seven months of Dr. Nafe's) has seen a marked increase in activities within the association, due largely to the ever-growing problems of medicine. Committee meetings have been numerous, and most committees were alert to their responsibilities. The frequent meetings have kept the executive secretary and other officers, too, busy on many week-ends.

Because the executive secretary has had some part in their development, it is appropriate to point out seven "firsts" that distinguish 1947-48 as a year of achievement. They are:

1. Selection of a general practitioner as the "Family Doctor of the Year."

2. Establishment of "ISMA News Flashes," a monthly news letter to delegates, officers, committee chairman, et cetera, by the Committee on Public Relations.

3. Conference of school administrators' and physicians' on school health problems.

4. Participation by the state association in the School and Community Health Workshop in Bloomington.

5. Presentation of medals to three seniors highest in scholarship in the 1948 graduating class of Indiana University School of Medicine.

6. Pilot course in postgraduate education at Evansville, with establishment of similar courses in other parts of state planned for 1949.

7. Decision to employ a field secretary to help county medical societies, association committees, do public relations, et cetera.

It is unnecessary to discuss these seven "firsts" here because all are mentioned in committee reports. They are evidence, however, that the association is moving forward and broadening its scope of activities.

A large percentage of the time of the executive secretary is devoted to routine details in connection with his duties as executive officer of the association. In addition to attending district medical meetings and county society and Woman's Auxiliary meetings as time permitted, the secretary took an active part as official spokesman for the association in numerous lay meetings and conferences. The secretary's community activities have been restricted to a degree in the year because of pressure of association work proper.

As managing editor of THE JOURNAL, the executive secretary has been concerned with budgetary problems of the periodical and has given considerable time to the business management, as well as to editorial details.

Glancing back over the year, the secretary takes pride in the fact that it has been a period of advancement for Indiana medicine. The association has become a greater force in state affairs, and as a public relations program is developed Indiana medicine will assume a stronger position in its relation to the people.

In conclusion, your secretary wishes to express his appreciation for the consideration and friendliness shown him and others of the headquarters office by the officers and members of the association. The secretary and his staff find their work interesting, stimulating and challenging.

RAY E. SMITH,
Executive Secretary.

TREASURER

House of Delegates,
Indiana State Medical Association.

Gentlemen:

The following report, prepared by George S. Olive and Company of Indianapolis, gives our financial statement ending December 31, 1947.

Since the first of the year we have been able to invest $5,000 in United States Treasury bonds, series G, which have been added to the general fund but are not shown in the attached report.

On page 1061 will be found the report of your Auditing Committee which met July 7, 1948, at the Indiana National Bank at Indianapolis.

The accountant's report is as follows:

January 12, 1948.

The Council,
Indiana State Medical Association,
Indianapolis, Ind.

Gentlemen:

We have examined the accounts and financial records of the Indiana State Medical Association for the year ended December 31, 1947, for the purpose of determining and verifying the assets, liabilities, and fund balances at December 31, 1947, and of reviewing the income and expense accounts for the year ended on that date on the basis of cash received and disbursed. In connection therewith, we have reviewed the system of internal control and the accounting procedures of the Asso-

ciation and, without making a detailed audit of the transactions, have examined and tested accounting records of the Association and other supporting evidence, by methods and to the extent we deemed appropriate.

In our opinion, subject to the comments made herein, the accompanying statement of assets, all funds, and related statements of income and expense, on the basis of cash received and disbursed, present fairly the position of the Indiana State Medical Association at December 31, 1947, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

General Comment

In exhibit A is presented an analysis of the increase in assets of the Association for the year ended December 31, 1947, showing in summary form the sources from which this increase was derived.

The increase of $11,029.96 resulted principally from an excess of operating cash receipts over operating cash disbursements of the general fund. Increases in the general fund are due mainly to additional income from membership dues. Additional United States Savings bonds in the amount of $5,000 were purchased for the general fund. A complete analysis of the increases and decreases in the general fund is presented in exhibit C.

Details of the assets of all funds are presented in exhibit B. There were no recorded liabilities at December 31, 1947, and the assets shown represent the surplus of each fund at that date. We have examined securities of the Association, which are kept in the Association's safe deposit box in the Indiana National Bank. Cash on deposit in banks was confirmed by direct correspondence with the depositories.

Analyses of the cash receipts and disbursements of the general fund, of The Journal of The Indiana State Medical Association, and of the Medical Defense fund are presented in exhibits C, D, and E.

Yours very truly,
Geo. S. Olive & Co.,
Certified Public Accountants.

Exhibit A

INDIANA STATE MEDICAL ASSOCIATION
Analysis of Increase in Assets, All Funds,
Year Ended December 31, 1947

TOTAL ASSETS, DECEMBER 31, 1947—		
Exhibit B		**$67,572.35**
TOTAL ASSETS, DECEMBER 31, 1946		**56,542.39**
NET INCREASE		**$11,029.96**
Arising from the following sources:		
Excess of operating cash receipts over operating cash disbursements, general fund, year ended December 31, 1947:		
Receipts—		
Exhibit C	$59,105.00	
Disbursements—		
Exhibit C	53,138.95	
		$5,966.05
U.S. Government bonds purchased	5,000.00	
		$10,966.05
Excess of operating cash receipts over operating cash disbursements, The Journal of the Indiana State Medical Association, year ended December 31, 1947:		
Receipts—		
Exhibit D	$39,800.95	
Disbursements—		
Exhibit D	39,373.79	
		427.16
Excess of operating cash disbursements over operating cash receipts, Medical Defense fund, year ended December 31, 1947:		
Receipts—		
Exhibit E	$ 2,936.75	
Disbursements—		
Exhibit E	3,300.00	
		(363.25)
TOTAL NET INCREASE		**$11,029.96**

Exhibit B

INDIANA STATE MEDICAL ASSOCIATION

Statement of Assets, All Funds
at December 31, 1947

GENERAL FUND:		
Cash on deposit—Exhibit C		$11,579.30
Petty cash fund		200.00
Investments:		
Marion County Flood Prevention bonds	$3,000.00	
Indianapolis City Hospital bonds	5,000.00	
U. S. Treasury bonds	8,000.00	
U. S. Savings bonds	15,000.00	
		31,000.00
Total general fund		$42,779.30
THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION:		
Cash on deposit—Exhibit D		6,872.58
MEDICAL DEFENSE FUND:		
Cash on deposit—Exhibit E	2,920.47	
Investments:		
Marion County Flood Prevention bonds	2,000.00	
U. S. Treasury bonds	5,000.00	
U. S. Savings bonds	5,000.00	
U. S. Baby bonds	3,000.00	
		15,000.00
Total Medical Defense fund		17,920.47
TOTAL ASSETS, ALL FUNDS—		
Exhibit A		$67,572.35

Exhibit C

INDIANA STATE MEDICAL ASSOCIATION

Comparative Statement of Cash Receipts and Disbursements, Years Ended December 31, 1947, and December 31, 1946

	Year Ended Dec. 31, 1947	Dec. 31, 1946	Increase (Decrease)
CASH BALANCE AT BEGINNING OF YEAR	$ 5,613.25	$ 1,028.92	$ 4,584.33
RECEIPTS:			
Membership dues	50,115.00	35,776.00	14,339.00
Income from exhibits	6,886.25	9,926.00	(3,039.75)
Interest income:			
U. S. Treasury bonds	212.50	290.65	(78.15)
U. S. Savings bonds	250.00	125.00	125.00
Indianapolis, Indiana, City Hospital bonds	200.00	200.00	
Marion County, Indiana, Flood Prevention bonds	127.50	127.50	
Meyer Nurse Scholarship fund	600.00		600.00
Krannert Nurse Scholarship fund	400.00		400.00
Refunds on annual session	306.25		306.25
Travel refunds		113.14	(113.14)
Check written off	7.50		7.50
Reimbursements from American Medical Association		72.41	(72.41)
	59,105.00	46,630.70	12,474.30
BEGINNING BALANCE PLUS CASH RECEIPTS	64,718.25	47,659.62	17,058.63
DISBURSEMENTS			
Transfer of applicable portion of dues to The Journal of The Indiana State Medical Association—Exhibit D	7,198.00	6,980.00	218.00
Medical Defense fund —Exhibit E	2,586.75	2,515.50	71.25
Purchase of securities	5,000.00		5,000.00
Headquarters office expense	14,563.37	13,499.43	1,063.94
Publicity committee	771.59	1,834.98	(1,063.39)
Public policy	2,513.67	325.99	2,187.68
Council	6,392.10	6,702.41	(310.31)
Officers	915.78	474.05	441.73
Annual session	6,834.76	6,700.03	134.73
Miscellaneous committees	4,312.17	1,756.31	2,555.86
Federal old age benefits tax	76.88	85.65	(8.77)
Instructional expense	191.77	15.63	176.14
Refunds of dues		372.00	(372.00)
National Conference on Medical Service	7.63	585.98	(578.35)
Payments for American Medical Ass'n		72.41	(72.41)
Refunds on exhibit rent	31.25	126.00	(94.75)
Fifty-Year Club	1,143.23		1,143.23
Woman's Auxiliary of The I. S. M. A.	600.00		600.00
	53,138.95	42,046.37	11,092.58
CASH BALANCE AT END OF YEAR	$11,579.30	$5,613.25	$5,966.05

Exhibit D

INDIANA STATE MEDICAL ASSOCIATION

Statement of Cash Receipts and Disbursements, Year Ended December 31, 1947
The Journal of the Indiana State Medical Association

BALANCE, JANUARY 1, 1947		$6,445.42
RECEIPTS:		
Subscriptions—members—Exhibit C	$7,198.00	
Subscriptions—non-members	451.50	
Advertising	31,386.60	
Collections on accounts receivable	62.00	
Single copy sales	255.40	
Electrotypes	157.45	
Miscellaneous	290.00	
Total receipts—Exhibit A		39,800.95
		46,246.37
DISBURSEMENTS:		
Salaries	$10,917.75	
Printing	24,790.34	
Office postage	280.36	
Journal postage	647.49	
Advertising commissions	281.10	
Electrotypes	689.54	
Reporting	171.75	
Press clippings	191.68	
Editor and editorial board expense	154.65	
Office supplies	393.79	
Rent	480.00	
Electricity	34.13	
Telephone and telegraph	207.65	
Federal old age benefits tax	69.31	
Miscellaneous	64.25	
Total disbursements—Exhibit A		39,373.79
BALANCE, DECEMBER 31, 1947 —Exhibit B		$6,872.58

Exhibit E

INDIANA STATE MEDICAL ASSOCIATION

Statement of Cash Receipts and Disbursements, Year Ended December 31, 1947
MEDICAL DEFENSE FUND

BALANCE, JANUARY 1, 1947		$3,283.72
RECEIPTS:		
Transfer of applicable portion of dues from the general fund—Exhibit C	$2,586.75	
Interest income:		
U. S. Treasury bonds	140.00	
U. S. Savings bonds	125.00	
Marion County Flood Prevention bonds	85.00	
Total receipts—Exhibit A		2,936.75
		6,220.47
DISBURSEMENTS:		
Malpractice fees	1,500.00	
Attorney fees	1,800.00	
Total disbursements—Exhibit A		3,300.00
BALANCE, DECEMBER 31, 1947 —Exhibit B		$2,920.47

A. F. WEYERBACHER, M. D.
Treasurer.

CHAIRMAN OF THE COUNCIL

House of Delegates,
Indiana State Medical Association.

Gentlemen:

The Council has tried earnestly and conscientiously throughout the past year to carry out what it believed to be the will of the House of Delegates in rendering its decisions. Councilors have been faithful in attendance and have given all problems thoughtful consideration before arriving at a conclusion. By meeting twice as often as several years ago, the Council has had more time to devote to its agenda.

Prorating of Dues

Of importance was action taken to prorate dues of physicians joining a county medical society in the last months of the year. Heretofore, new members taken in at that time were required to pay the full $15 annual state dues for the few remaining months of the year. Under the new regulation, after October 1, any physician joining a county medical society may become a member of the state association for that year by paying $5. He receives THE JOURNAL and malpractice defense benefits from date of becoming a member until the end of that year.

Funds for Auxiliary

The Council voted financial assistance to the Woman's Auxiliary in the amount of $800. The purpose of the appropriation is to pay for printing and distributing *The Doctor's Wife*, to assist with convention expense, and to aid the Auxiliary's Legislative Committee.

Only General Assemblies

As an experiment at the 1948 annual session, the Council decided that all scientific meetings be of the "unity" type. The sections will meet only to transact routine business, such as elect officers, et cetera. All scientific papers will be presented before the entire membership. It was thought that the speakers, many of whom come a long distance and at great personal sacrifice of time, are entitled to the larger audience, and that all members of the association should gather in one assembly to hear them.

General Practitioner Award

Because of the favorable public reaction to the selection of the "Family Doctor of the Year" by the A. M. A. in 1948, the Council decided to give similar recognition to some Indiana general practitioner. The House of Delegates will make the selection from three names submitted by the Council.

Field Secretary

Addition of a field secretary to the state headquarters staff was voted after such a recommendation was received from the Committee on Medical Education and Hospitals. His duties will be to visit the various county medical societies once a year, to help the committees with their programs, et cetera, and to promote public relations. The Executive Committee will interview applicants and from its recommendations the Council will choose the man for the position.

New Journal Assistant

Upon the resignation of Dr. N. K. Forster as associate editor of THE JOURNAL, Dr. Frank B. Ramsey of Indianapolis was selected as his successor. Dr. Ramsey has proved to be very helpful in the editorial department.

Blood Bank Policy

The Council was called upon to declare a policy in regard to the establishment of American Red Cross Blood Banks. It was the unanimous decision that they should locate only in communities where blood plasma is not now available, and with the approval, and under the direction of, the medical profession.

Prepayment Medical Care

The prepayment medical care insurance company organized in 1946 under authority from the House of Delegates . . . Mutual Medical Insurance, Inc. . . . completed its second year September 1, 1948. The company has been very successful and all may take pardonable pride in its record. Through this company nearly 200,000 persons in Indiana are able at the present time to budget for their medical services. The company is in sound financial condition, and has greatly enlarged its area of coverage.

Medical and Nursing Scholarships

Six young men are being helped toward medical educations through the medical school scholarships. Upon completion of their internships they will practice in communities needing doctors. Three thousand dollars is being spent annually on this project. Six young women are being helped through nursing training school through scholarships provided by the association, at a total cost of $1,200 a year. Contributions from individuals outside the profession have enabled the awarding of scholarships to five other girls. The Committee on Medical and Nursing School Scholarships would like to help other students, many applications from deserving individuals being on file. Any physician who knows a person or business organization interested in helping in this praiseworthy cause is asked to contact them.

Postgraduate Education

A pilot course of postgraduate education has been tried successfully this year at Evansville by the Committee on Medical Education and Hospitals, with financial help from the Council. Through the experience gained this year it is hoped that similar courses may be offered in scattered parts of the state in 1949.

This, briefly, covers the paramount activities of the Council at its five meetings. The minutes of all meetings have been printed in THE JOURNAL and may be referred to for complete details, as follows:

October 28 and 29, 1947 meetings—December, 1947, issue.

January 18, 1948—March, 1948, issue.

April 4, 1948—May, 1948, issue.

July 11, 1948—September, 1948, issue.

This report affords an opportunity for the chairman to thank publicly members of the Council for the kindness and consideration shown him at all times.

ALFRED ELLISON, M.D., *Chairman.*

REPORTS FROM DISTRICT COUNCILORS

FIRST COUNCILOR DISTRICT

The most important progress made during 1947 and 1948 in the first district has been made in a postgraduate educational program, started and sponsored by the Vanderburgh County Medical Society in cooperation with the Indiana State Medical Association and Indiana University. Subjects covered were:

February: "Febrile Diseases"; March: "Traumatic Surgery"; April: "Obstetric Complications"; May: "Legal Medicine"; and June: "Atomic Energy."

The meetings were held in the auditorium of Evansville College, with excellent cooperation of the school. Attendance averaged one hundred and fifty doctors from Southern Indiana, Northwestern Kentucky, and Southeastern Illinois.

The hospital situation in the district is being improved by a new unit under construction in Perry County, between Tell City and Cannelton. Also, meetings were held by interested groups in Mount Vernon to discuss the possibility of building a small hospital there. It was decided that it would not be advisable, since Evansville is only fifteen miles away.

H. T. COMBS, M.D., *Councilor.*

SECOND COUNCILOR DISTRICT

There has been an increase in attendance at the county medical meetings throughout the year. These meetings have been very interesting and instructive, with several out-of-county physicians as speakers.

On May 20, 1948, the district meeting was held at Bloomington with the Owen-Monroe County Medical Society as host to the members of the Second District Medical Society. Dr. William C. Reed of Bloomington was elected as the new Councilor, beginning January 1, 1949. Sullivan was selected as the 1949 meeting city. Dr. J. T. Oliphant of Farmersburg was elected president, and Dr. J. S. Brown was reelected secretary-treasurer. In the afternoon a splendid scientific meeting was held, with a talk by Dr. Frank Ramsey of Indianapolis on "Cancer of the Colon and Rectum." A motion picture was shown on "Anomalies of the Bile Ducts," and a paper was presented by Leland S. McClung, Ph.D., of Indianapolis, on chemistry of toxoids.

Dr. Philip T. Holland of Bloomington opened the evening program with an address of welcome, which was followed by a talk by Ray E. Smith of Indianapolis, executive secretary of the Indiana State Medical Association.

The principal address of the evening was an interesting and well delivered message on "Medical Organization Problems," by Dr. Cleon A. Nafe of Indianapolis.

J. H. CROWDER, M.D., *Councilor.*

THIRD COUNCILOR DISTRICT

The medical organizations comprising the Third District are in good condition.

We had our spring meeting at French Lick. The attendance was fair and a good program was enjoyed by all. We were fortunate in having the president and president-elect with us.

We are planning our next meeting in May, 1949, and will meet in Corydon. This will be most appropriate, Corydon having been the first Capitol of Indiana, and 1949 commemorating 100 years of organized medicine in Indiana.

WM. H. GARNER, M.D., *Councilor.*

FOURTH COUNCILOR DISTRICT

The Fourth District of the Indiana State Medical Association held its annual meeting at Batesville May 19, 1948.

The following officers were elected for 1949:

President, Dr. Charles Manley, Rising Sun.

Vice-president, Dr. D. D. Dickson, Greensburg.

Secretary-treasurer, Dr. F. A. Streck, Lawrenceburg.

Councilor, Dr. George A. May, Madison (to serve unexpired term of Dr. O. A. Turner).

A golf tournament was held in the morning, with a scientific program in the afternoon, and a banquet in the evening.

GEORGE A. MAY, M.D., *Councilor.*

FIFTH COUNCILOR DISTRICT

The Fifth District Medical Society held its annual meeting at the Old Trails Inn near Greencastle June 2.

This was an all-day meeting, with golf in the morning and a scientific program on hypertension in the afternoon.

The following papers were presented: "Recent Experimental Work on Hypertension," by Dr. Kenneth G. Kohlstaedt; "Medical Phase of Hypertension," by Dr. James O. Ritchey; and "Recent Surgical Progress on Hypertension," by Dr. Dwight W. Schuster.

Dr. A. P. Hauss, of New Albany, president-elect of the Indiana State Medical Association, spoke in the evening.

Dr. J. F. Maurer, of Brazil, was elected president; Dr. George F. Parker, of Greencastle, vice-

president; and Dr. M. C. Topping, of Terre Haute, secretary-treasurer. Dr. A. M. Mitchell, of Terre Haute, was re-elected councilor.

The 1949 meeting will be held at Brazil.

A. M. Mitchell, M.D., *Councilor.*

SIXTH COUNCILOR DISTRICT

The district has had a harmonious year with increase of activity in each component society. Excellent programs have been provided for the meetings, attendance has been nearly perfect, possibly because the social aspects of the meetings have been stressed. Desirability of attention to social components of the monthly program has been fully demonstrated as being of equal importance with the purely scientific.

Hospitals continue filled, but the load will be lightened by construction of new institutions, which is progressing in spite of high costs.

Wayne County has raised sufficient funds to double the capacity of Reid Memorial Hospital. Hancock County voted an additional $200,000, to ensure the new Greenfield Hospital. The Hancock Society, by its leadership, demonstrated that a well organized society can lead any community to achieve desirable ends. Rush County has sufficient funds, the architect has been selected, and completion of the hospital project is assured. Fayette County is expected to add a wing to the Connersville Hospital to meet its urgent needs. Shelby County contemplates an addition to its presently over-filled hospital. Henry County has reached capacity of its last addition and another wing is being considered.

The Cancer Society has raised a large sum and intends furnishing several hospitals with adequate equipment. Wayne County has received such an installation, and Henry County will be given such equipment, in each case at a cost of $15,000.

Cancer screening clinics are in action or being established. Heart clinics have not as yet reached the established stage.

The annual district meeting in May was entertained by the Shelby County profession, who maintained their notably high standards of program and entertainment. Some 150 were in attendance. Doctors Will Thompson of Liberty, Clifford E. Canaday of New Castle, and Robert W. Kuhn of Wilkinson, were re-elected president, vice-president, and secretary. Among the distinguished visitors were Doctors Max Cutler and W. J. Reich of Chicago, Doctors Sullivan and Sage of Indianapolis, President Nafe of the state association, Secretary Ray Smith, and our own former state president, Dr. Jesse Ferrell.

Harmony prevails throughout the district, the doctors are prosperous, and the standards of care continue high.

Death has taken some of our wheel horses, but sufficient younger men have begun practice to keep our numbers even.

Walter U. Kennedy, M.D., *Councilor.*

SEVENTH COUNCILOR DISTRICT

The Seventh District held a very successful meeting last fall at Martinsville, with the Morgan County Society as host. Officers elected at this meeting were: President, Horace F. Banks, Indianapolis; President-elect, Harry Murphy, Franklin; Secretary, Don E. Wood, Indianapolis; Councilor, C. J. Clark, Indianapolis.

The spring meeting was held in Indianapolis, in conjunction with the Marion County Society. It likewise was very successful, with Doctors Arlie R. Barnes and B. R. Kirklin as principal speakers. Brigadier General George Armstrong also spoke.

The 1948 fall meeting was held at Franklin at the Johnson County Country Club, September 22. A golf tournament was conducted with Doctors Joe Walther and Arthur Records as co-chairmen. Doctors William Province and James O. Ritchey were the speakers on the scientific program. A business meeting followed the scientific session. Eugene Pulliam was the speaker at the dinner at the Country Club at 7:30. Bridge and entertainment was arranged by the auxiliary for ladies of the Seventh District.

C. J. Clark, M.D., *Councilor.*

EIGHTH COUNCILOR DISTRICT

The annual meeting of the Eighth District Medical Society was held at Anderson on Wednesday, May 19, 1948. The entertainment and program, arranged by Dr. Fred Wishard, drew the largest attendance that we have had for several years. We were guests of Delco-Remy organization and were shown how the industry was cooperating with the private physician in maintaining health standards for the people.

A two-hour conducted tour through the plants gave us first-hand information regarding conditions under which our patients work.

After a most excellent dinner, Dr. James G. Townsend, chief of the Division of Industrial Hygiene, U. S. Public Health Service, read a paper on "The Problems Incident to Maintaining a High Health Standard in Industry." He pointed out the plant physician's job in the field of preventative medicine; and the family doctor's in curative medicine, and stated: "The plant physician, through close contact with his people, spots disease or afflictions early and refers employees to their family doctors. In so doing family doctors effect early cures that eliminate much needless suffering."

President Cleon Nafe, M.D., and Secretary Ray E. Smith, as well as many other guests from surrounding counties, were present.

The officers elected for 1949 are: Dr. J. H. Clevenger, president; Dr. R. A. Henderson, secretreasurer; and Dr. E. H. Clauser, councilor.

E. H. Clauser, M.D., *Councilor.*

NINTH COUNCILOR DISTRICT

The annual meeting of the Ninth District Medical Society was held at Frankfort on May 13, 1948. Dr. Frank A. Beardsley of Frankfort, president of the society, presided at the meetings. Dr. Claude D. Holmes of Frankfort served as secretary. Despite rain, 17 of the members participated in a golf tournament at the Frankfort County Club. A delightful luncheon was served the doctors' wives at the home of Mrs. Frank A. Beardsley.

The delegates' luncheon was followed by the business meeting. The Tipton County Medical Society is to be host for the 1949 meeting. Officers for 1949 consist of Dr. George H. Warne of Tipton, president, and Dr. George Compton of Tipton, secretary.

An excellent scientific program was held in the afternoon. Speakers were Doctors James D. Peirce, Frank M. Gastineau and J. Stanley Battersby, all of Indianapolis.

The society was honored by the presence of Dr. Cleon A. Nafe, president of the Indiana State Medical Association, and Mr. Ray E. Smith, executive secretary of the Indiana State Medical Association, who attended the banquet in the evening.

Wemple Dodds, M.D., *Councilor.*

TENTH COUNCILOR DISTRICT

The Tenth Councilor District held its spring meeting in conjunction with the Lake County Medical Society, May 5, at Phil Smidt's restaurant in Whiting, with district president, Neal Davis, of Lowell, presiding.

The program began at 2:00 p.m. with a tour of the Lever Bros. plant nearby where physicians and their wives were shown the manufacturing processes of soap, shortening, detergents and other products of the company. Each guest received a box containing one sample of each of the company's products.

Following the cocktail hour and dinner at Phil Smidt's, the meeting was turned over to Dr. E. S. Jones of Hammond, who had arranged the program. Dr. J. Garrott Allen, now of Chicago University, and medical director of the Manhattan Project during the war, spoke on the medical effects of atomic energy radiation. Dr. Allen showed slides of the effects on animals used in the Bikini atom tests to illustrate his talk.

Because of the high interest in this industrial region in Dr. Allen's subject, a record of 232 doctors and wives attended the meeting. Among the guests were officers of the American Association of Industrial Physicians and Surgeons, and members of the Indiana State Medical Association's Industrial Health Committee.

Following this same pattern, the fall meeting of the district, October 14, will begin with a tour of the Standard Oil Refinery at Whiting, the largest in the world. The program for the evening will include election of new officers and a talk on "Poliomyelitis" by Dr. Archibald Hoyne, director of Chicago's Municipal Contagious Diseases Hospital. The meeting will again be held at Phil Smidt's.

William H. Howard, M.D., *Councilor.*

ELEVENTH COUNCILOR DISTRICT

The Eleventh Councilor District Medical Association had a very good year, 1947-1948.

The seven counties composing the district are all in good shape and hold regular meetings.

We continue to have two regular meetings in the district each year, one in May and one in September, with good attendance at each meeting.

We have one hundred and eighty-two active members and sixteen honorary members, making a total of one hundred and ninety-eight.

At the May meeting, held in Wabash, Dr. W. W. Holmes, of Logansport, was elected president; Dr. O. G. Brubaker, of North Manchester, was re-elected secretary-treasurer; and Dr. C. S. Black, of Warren, was re-elected councilor for another term of three years.

Members of the state medical association are always welcome to attend any of our meetings.

C. S. Black, M.D., *Councilor.*

TWELFTH COUNCILOR DISTRICT

All member societies of the Twelfth Councilor District are functioning. The annual district meeting was held in Fort Wayne on April 6, 1948. The speakers were Dr. Stanley I. Glickman, Dr. Robert Buxton and Dr. James L. Wilson, all from the University of Michigan Medical School. Dr. Cleon A. Nafe, president of the Indiana State Medical Association; Ray E. Smith, executive secretary of the association, and Dr. Paul A. Garber, councilor of the district, spoke briefly.

The following officers were elected for the coming year: Dr. Benjamin F. Pence, Columbia City, president; Dr. Edward H. Schlegel, Fort Wayne, vice-president; and Dr. Karl M. Beierlein, Fort Wayne, was re-elected secretary-treasurer.

Paul A. Garber, M.D., *Councilor.*

THIRTEENTH COUNCILOR DISTRICT

On November 12, 1947, the last meeting of the Thirteenth District was held in South Bend, with 125 physicians attending. We had an unusual number of distinguished speakers and guests, including Doctors George Lull, R. L. Sensenich, Floyd Romberger, Cleon Nafe and Mr. Ray Smith. Doctor Lull gave a most interesting talk on the various functions of the American Medical Association.

The next meeting of the district is to be held in the LaSalle Hotel in South Bend on Wednesday, November 10. A cordial invitation is extended to doctors outside the district who might care to attend.

Alfred Ellison, M.D., *Councilor.*

EXECUTIVE COMMITTEE

House of Delegates,
Indiana State Medical Association.

Gentlemen:

A review of the activities of the Executive Committee for the past year (August 1, 1947, to August 1, 1948,) reveals that nine meetings were held, many of which lasted for more than five hours because of the large volume of business to be transacted. Minutes of all the meetings have appeared in THE JOURNAL, and for this reason the committee's actions should be pretty well known, so only highlights of the committee's work will be set forth in this report.

Until the Council began meeting four times a year, expediency required that the Executive Committee make decisions on a number of matters which now can be referred by the committee to the Council, often with recommendations for guidance of the councilors. Throughout the year the Executive Committee has counseled with committee chairmen and others and has approved or disapproved of suggested policies in keeping with the high aims and purposes of the state medical association.

Because it meets nearly every month, the committee is called upon to handle a variety of details necessary to the administration of a professional organization of more than thirty-six hundred members. This work takes the committee into the field of finance and management, as well as policy-making, and hours are necessarily consumed in transacting its routine duties. This part of the committee's work is decidedly unglamorous and details would not be of interest to the delegates. To the contrary, they would be very boring.

In addition to its regular responsibilities, what has the Executive Committee contributed to the advancement of medicine in 1947-1948? Seven specific accomplishments can be isolated from its multiplicity of activities for benefit of the record. They are:

1. Made it possible for the state association to become one of the participating groups in the annual Workshop in School and Community Health Education held at Bloomington the middle of August.

2. Approved a new contract for "home town care" of veterans with the Veterans Administration.

3. Nominated an Indiana family physician for the A. M. A. "General Practitioner Award of 1948" who was among three in the nation voted upon by the A. M. A. House of Delegates.

4. Refurbished state headquarters so the office would be in keeping with the prestige of the profession.

5. Took over the responsibility of advising the state Woman's Auxiliary in matters of policy.

6. Encouraged county medical societies to join in the drive for nurse recruitment by sending them portfolios of advertising and promotion material for use in local newspapers.

7. Interviewed applicants for the position of field secretary in order to make recommendations to Council.

Membership Report

The membership of the association continues to show gains. On August 1, 1948, the paid-up members totaled 3,615, a record high. The steady growth of the association is best revealed by the fact that on August 1, 1933, fifteen years ago, the membership was 2,546, or 1,069 less than on the same date of this year. With the gain in membership has come an increase in the activities of the association without increase in headquarters personnel. Comparative membership figures for the last five years follow:

Year	Number of Physicians in Indiana	Regular Members	Honorary Members	Total Members
1944	4,165*	3,197**	129	3,326
1945	4,165	3,187***	142	3,329
1946	4,165	3,251****	155	3,406
1947	4,165	3,374*****	172	3,546
1948	4,165	3,438******	177	3,615

* Figure taken from the latest directory of the American Medical Association.

** Includes 936 men in service who received membership gratis.

*** Includes 1,019 men in service who received membership gratis.

**** Includes 831 men in service who received membership gratis.

***** Includes 117 men in service who received membership gratis.

****** Includes 55 men in service who received membership gratis.

THE JOURNAL

The increased cost of producing THE JOURNAL has posed many problems of finance this year. Having advance knowledge that the contract for printing, press work, binding and paper would jump 15 percent on January 1, 1948, the Council increased THE JOURNAL allowance from membership dues from $2.00 a year to $3.00 a year. This additional income, together with some very special economies in JOURNAL management, has enabled the periodical to break about even thus far. It has been cited by the executive secretary, and it bears repeating, that the cost to produce twelve issues of THE JOURNAL is $9.60, or 80 cents per copy. The revenue from advertising, of course, pays the greater share of it.

It is costing virtually 300 percent more today to get out THE JOURNAL than in 1940. How costs have risen is best illustrated by enumerating the printer's price-per-page increases of the last eight years:

1940—$ 5.20
(This price prevailed until 1945)
1945—$ 6.75
1946—$10.80 (first six months)
1946—$11.54 (last six months)
1947—$13.25
1948—$15.25

The table below also reveals how costs have skyrocketed:

Year	Cost	No. pages (without inserts)
1944	$10,682.64	1346
1945	12,042.36	1288
1946	21,283.49	1476
1947	24,790.34	1462
1948 (1st 7 months)	15,683.08	812

Not all the news is bad news, however. The Executive Committee points with pride to three economies placed into effect, which, if projected for a year, would approximate $1,800 in savings in JOURNAL operation. In grouping advertisements which run in color so that they may be printed in the split-ink fountain technique, $301.20 was saved in press costs in the first five months. By reducing the size of the professional cards by half an inch, four more can be placed on a page. They have been improved in appearance by resetting them in smaller type. This change saves approximately $70 an issue. Eliminating the use of envelopes in mailing has exacted a saving of $400 a year.

Following is a table showing the number of JOURNAL pages for the past six years:

	Reading	Per Cent Reading	Adv. Pages	Per Cent Adv.	Total Pages	Aver. Pages Per Issue
1942	752	61	488	39	1240	103.3
1943	736	59	516	41	1252	104.1
1944	758	56	588	44	1346	112.1
1945	580	44	754	56	1334	111.1
1946	696	46	824	54	1520	126.7
1947	681	45	837	55	1518	126.5

Advertising

The volume of advertising has begun to show a decline. Space buyers are becoming more selective, and the outlook for the future is none too bright. A comparison of advertising revenue for the first six months of 1948 with the first half of the last four years follows:

First 6 Months	1945	1946	1947	1948
Bureau agency	$6,114.28	$8,459.62	$9,779.78	$8,743.76
Direct	2,766.18	4,295.43	5,167.11	5,066.43
Total	$8,880.46	$12,755.05	$14,946.89	$13,810.19

New Associate Editor

Dr. N. K. Forster resigned as associate editor because he moved to Los Angeles, and the Council, on January 18, 1948, elected Dr. Frank B. Ramsey of Indianapolis as his successor. He has helped the editor, Dr. E. M. Shanklin, in passing upon manuscripts and has contributed a monthly column, "Medical Panorama."

Four Special Numbers

Four special numbers were put out in the August 1, 1947, to August 1, 1948, period, as follows: General Practice, September, 1947; Convention, October, 1947; Medical Yearbook, January, 1948; and Conservation of Vision, May, 1948. In the Medical Yearbook issue the names and addresses of the Woman's Auxiliary were included for the first time.

THE JOURNAL staff will welcome suggestions and constructive criticisms. THE JOURNAL is issued by the association for the benefit of its members, and physicians should speak up if the publication is not fulfilling its mission. The staff strives to maintain high standards and to make THE JOURNAL the very best.

Medical Defense Activities

1. *Malpractice cases.* A year ago, at the time of this report, August 1, 1947, the following twelve cases were pending before the committee, four of which were closed during the year, leaving eight cases still pending:

Case No. 200—Suit filed February 2, 1932. Pending.

Case No. 241—Suit filed February 7, 1941. Awaiting assignment for trial.

Case No. 242—Closed. Suit filed January 28, 1942. Dismissed February 4, 1948, for want of prosecution. Statement for attorney's fees not yet received.

Case No. 249—Suit filed January 6, 1944. Awaiting assignment for trial.

Case No. 250—(Closed). Suit filed December 7, 1944. Case dismissed February 27, 1948. Expense $325.00 paid April 20, 1948.

Case No. 251—Suit filed September 25, 1942. Pending.

Case No. 252—Suit filed August, 1944. Awaiting assignment for trial.

Case No. 255—Suit filed September, 1945. Awaiting assignment for trial.

Case No. 256—Suit filed February 27, 1946. waiting ruling of the court on a motion to make more specific.

Case No. 260—Suit filed July, 1946. Pending in court on motion to make more specific.

Case No. 262—(Closed). Suit filed January 4, 1947. Judgment for defendant in lower court. Expense $500.00, paid July 31, 1948.

Case No. 263—(Closed). Suit filed December 19, 1946. Four days' trial resulting in verdict for defendant. Expense, $450.00, paid May 13, 1948.

Since August 1, 1947, and up to August 1, 1948, the following four new cases have come before the committee, one of which has been closed, making a total of eleven cases pending at the present time as against twelve unclosed cases at the same time last year:

Case No. 264—Suit filed January 28, 1948. Pending in court on motion to make more specific.

Case No. 265—(Closed). Suit filed December 18, 1946. Dismissed June 2, 1947. Expense, $150.00, paid May 13, 1948.

Case No. 266—Suit filed March 17, 1948. Pending on motion to make more specific.

Case No. 267—Suit filed September 10, 1947. Pending.

The following cases were closed prior to August 1, 1947, but as statements for attorneys' fees were received and paid *after* that date, these cases are listed again this year:

Case No. 258—(Closed). Suit filed December, 1944. Settled for $200.00 and dismissed, 1947. Expense, $450.00, paid November 17, 1947.

Case No. 259—(Closed). Suit filed December, 1945. Seven days' trial; judgment for defendant. Expense, $650.00, paid September 30, 1947.

2. *Medical Defense Fund Statement,* from August 1, 1947, to August 1, 1948:

Balance, August 1, 1947		$4,561.98
Receipts:		
Dues, 84—1947 members	$ 63.00	
3,437—1948 members	2,577.75	2,640.75
Interest on bonds		350.00
		$7,552.73
Disbursements:		
Malpractice fees	$2,525.00	
Salary of Association attorney	1,800.00	4,325.00
Balance in Medical Defense Fund checking account, August 1, 1948		$3,227.73

C. H. McCaskey, M. D., *Chairman*
W. L. Portteus, M. D.
Cleon A. Nafe, M. D.
Augustus P. Hauss, M. D.
Alfred H. Ellison, M. D.

COMMITTEE ON PUBLIC POLICY AND LEGISLATION

House of Delegates,
Indiana State Medical Association.

Gentlemen:

Although no session of the Indiana General Assembly has been held within the last year, the Committee on Public Policy and Legislation hasn't been on vacation. The committee has kept in touch with public thinking and activity in the field of public health and legislation. Eight bulletins have been issued since August 1, 1947, to keep county legislative committees and officers of county societies fully informed.

During the year the committee concentrated on one project, that of getting physicians to become candidates for the state legislature in the May primaries. Five were persuaded to run, and two were nominated. It seems very probable that the medical profession will be represented in the 1949 legislature when it convenes in early January.

One bill is being prepared for introduction into the next session of the state legislature in accordance with action of the 1947 House of Delegates. It would make it unlawful for persons to use the prefix "Doctor" professionally without their being graduates of a recognized college or university. The bill will provide also that those who use the prefix must indicate by suffix the type of doctor degree they hold.

The committee opposed the clause in the Selective Service bill which authorized the drafting of physicians up to 45 years of age, and is glad to report that the Indiana delegation in Congress cooperated in the elimination of this discriminatory provision before the bill was passed.

From time to time the committee has contacted the Senators and Representatives from Indiana about pending legislation before Congress. The expressions of the committee have been graciously received and, in many instances, its advice and counsel sought.

In the forthcoming session of the state legislature the usual efforts to lower educational qualifications of those who practice the healing arts, and attempts to push through legislation detrimental to the health and welfare of the people, may be expected. Members of the association are asked to support candidates in the November 2 election who stand for high educational and public health standards, both at the state and national levels.

Norman M. Beatty, M.D.
J. William Wright, M. D. } *Co-chairmen,*
J. R. Doty, M. D.
Harold J. Halleck, M. D.
John M. Palm, M.D.
John M. Paris, M.D.
Eugene F. Boggs, M.D.
Harry E. Murphy, M.D.
James L. Wyatt, M.D.
Frank M. Scott, M.D.
Margaret A. Owen, M.D.
P. J. V. Corcoran, M.D.

COMMITTEE ON PUBLICITY

House of Delegates,
Indiana State Medical Association.

Gentlemen:

Twenty-three times during the period from August 1, 1947, to August 1, 1948, the Committee

on Publicity met to transact its business and, in accordance with its duties expressed in the Bylaws of the state association, "to give the lay public a better knowledge and understanding of the aims and objects of scientific medicine." The Committee on Publicity lays claim to being the "meetingest" committee of the association.

Although the business of the committee is for the most part routine, it points with pride to two projects inaugurated during the year: (1) preparation of packets of material against compulsory sickness insurance and (2) presentation of four "live" radio programs. The packets were sent to twenty-three college libraries in the state and to all county Woman's Auxiliaries, and were distributed to individuals requesting material on the subject. The "live" radio programs were written and produced by Mrs. Lyman D. Eaton, chairman of the Radio Committee of the state Woman's Auxiliary, and after the scripts were approved by our committee, went on the air on time assigned to our committee by WFBM, Indianapolis.

The purpose of assembling the material against socialized medicine was to provide source material for college students, many of whom need data for term papers, essays or theses; to supply the Woman's Auxiliary with facts for use in their programs; and to have available the latest information upon the subject when requests are received at headquarters office. The contents of the packets are varied, and include a generous supply of material about prepayment medical care insurance.

Newspaper Releases

Weekly newspapers of the state not using "Hints on Health" were sent copies of the column and asked if they wished to get it. The response was very gratifying. The committee is proud to report that 151 weekly papers are now printing the column, nearly twice as many as before.

In addition to the fifty-two "Hints on Health" releases, twenty articles on health and association activities were distributed to daily and weekly papers.

"Hints on Health" columns were as follows:

Ragweed Hay Fever.
Poison Ivy.
Infantile Paralysis.
Stuttering.
Body Changes with Age.
Cancer of the Breast.
Warts on Soles.
Autumn Disease.
Undulant Fever.
Give Doctors All Facts.
Cataracts.
Kidney Stones.
Proper Diet.
The Coronary Arteries.
Brushing the Teeth.
Infant's Diet.
Osteoarthritis.
Whooping Cough.
Trichinosis.
Female Adolescence.
Rickets.
The Sciatic Nerve.
Chronic Alcoholism.
Mumps.
Treatment of Burns.
Teeth Need Checking.
Physical Exertion.
Exercise of the Feet.
Spotted Fever.
Tetanus or Lockjaw.
Mental Illness.
Glaucoma.
Acute Gout.
Diarrhea in Babies.
Pregnancy Care.
Baby's Health.
High Blood Pressure.
Bronchitis.
Sleeplessness.
Scarlet Fever.
Sore Throat.
The Common Cold.
Frostbite.
The Prostate Gland.
Pains in the Legs.
Chronic Hives.
Undulant Fever.
Swimming Advice.
Gum Infection.
Heat Exhaustion.
Colored Glasses.
Poison Ivy.
Pre-School Examination.
Benefits of Sun.
Sunbaths for Babies.

The twenty general releases were:

Medical Association Offers Scholarships to Nursing School Student.
Heart Disease and Hay Fever Exhibit at State Fair.
Pre-School Examinations.
Medical School Scholarship Awards.
Woman's Auxiliary to Broadcast Program on Hypertension.
1947 Annual Session (seven releases).
Physicians Award Scholarships to Nursing School Students.
Doctors Suggest Health Check-up as 1948 Resolve.
Secretaries' Conference (three releases).
Gardening is Good for Mind and Body.
Anderson Boy Received $2,000 Medical School Scholarship.
Nursing School Scholarships Awarded to Two Girls.

Radio Program

Radio Station WFBM, Indianapolis, kindly provided the committee with fifteen minutes of broadcast time a week throughout the year. As previously mentioned, the Radio Committee of the Woman's Auxiliary used four periods for playlets, the subjects being:

Hypertension.
Blue Cross and the Doctors' Plan.
Rheumatic Fever.
Anesthesia.

The scripts, prepared by Mrs. Eaton, were excellently done. Mrs. Eaton procured the acting talent for the playlets. Whether similar programs will be given during the balance of 1948 and in 1949 has not been decided.

Three series of radio transcriptions authored by the Committee on Health Education of the American Medical association were used during the year. They were:

Keeping Your Baby Well.
Before the Doctor Comes.
Medicine Serves America.

Speakers Supplied

One of the functions of the Committee on Publicity is to supply speakers for medical and lay groups when requests are received at state headquarters. The committee can be of service to program chairmen and secretaries of county medical societies in getting scientific speakers for their meetings as well as for lay groups. All requests will receive prompt attention.

A list of organizations supplied follows:

1947

November 17—Greensburg Rotary Club.

1948

January 11—Hendricks County Medical Society, Danville.
January 15—Woman's Auxiliary, Indianapolis Medical Society.
January 22—Regional Conference of Licensed Nursing Homes, Indianapolis.
January 29—Kiwanis Club, Madison.
February 17—George Washington Club, Indianapolis.
April 1—Fountain-Warren County Medical Society, Kingman.
April 9—Woman's Auxiliary, Floyd County, New Albany.
April 22—Lions Club, Swayzee.
May 25—Porter County Medical Society, Valparaiso.
June 2—Indiana Public Health Association, Indianapolis.
June 2—Fifth District Medical Society, Greencastle.
June 3—Fountain-Warren County Medical Society, Covington.
June 16—Rotary Club, Columbia City.

Change in Auxiliary Policy

For a number of years the Committee on Publicity has served as the advisory committee to the state Woman's Auxiliary. Because the Committee on Publicity is not a policy-making or an appropriating body of the state association, sentiment developed for placing the Woman's Auxiliary directly under the Executive Committee. Our committee concurred in this thinking, so in April the responsibility of advising the good women was shifted to the Executive Committee.

Prior to the change, however, the Committee on Publicity drafted program suggestions for the Auxiliary for 1947-1948, and gave advice on several other matters. The Auxiliary is working hard in the interest of the medical profession. Our committee wishes to acknowledge the fact and to wish the organization continued success.

Listing Physicians by Specialties

Of interest to delegates is an opinion by the committee in regard to the propriety of listing physicians by their specialties in telephone books. The committee expressed the view, in answer to a letter from a county society secretary, that it is imprudent for physicians to list themselves by specialties in lay directories, but that such classifications are all right if confined to medical publications and medical directories. The committee was of the opinion, however, that each county medical society should decide its own policy in such matters.

Thanks to President

The members of the Committee have profited immensely by having the president of the association attend most of our meetings this year. His advice and counsel have been most helpful. His sacrifice of time to meet with us has given all of us encouragement.

Financial Statement

Expenditures of the committee from August 1, 1947, to August 1, 1948, follow:

Postage	$ 109.52
Stationery and mimeograph supplies	139.87
Printing	642.55
Broadcasting expense	40.00
Speaker's traveling expenses	36.81
Miscellaneous	46.71
	$1,015.46

Homer G. Hamer, M.D., *Chairman,*
James O. Ritchey, M.D.,
Marlow W. Manion, M.D.

COMMITTEE ON INDUSTRIAL AND CIVIC RELATIONSHIP

House of Delegates,
Indiana State Medical Association.

Gentlemen:

This committee had nothing referred to it during the year and therefore has no report.

Inasmuch as the work of this committee is similar to that of the Committee on Industrial Health, and it seems unnecessary that the association have two committees dealing with the same problems, we recommended that in writing the new By-Laws for the association this committee be discontinued and the Committee on Industrial Health replace it as one of the standing committees.

Philip E. Yunker, M.D., *Chairman,*
A. C. Remich, M.D.,
E. B. Haggard, M.D.

COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

House of Delegates,
Indiana State Medical Association.

Gentlemen:

The committee has had two meetings since the last meeting of the Indiana State Medical Association. The first meeting was on January 17 at the Columbia Club in Indianapolis. All members, including Doctors C. J. Clark, O. O. Alexander, Harry P. Ross, Harry E. Klepinger, and E. H. Clauser, were present.

The committee carefully considered the two mandates from the House of Delegates, the first of which concerned study of premedical education and the second the study of the possibility of employment of a full-time secretary. After much deliberation the committee voted whole-hearted support of the present administration of the medical school and the urgency of moving the first year of the medical course from Bloomington to Indianapolis, and also recommended that the trustees of Indiana University be shown the need of a larger budget for the medical school. The committee also at this meeting recommended to the Council and

the House of Delegates the employment of a full-time field secretary who should devote a considerable part of his time to the promotion of educational programs throughout the state. The committee voted to ask the Council to allot $600 for its work during the coming year. Considerable time was given to the discussion of the graduate education program for Vanderburgh County during the coming year as a pilot program for studying the problems of graduate education at the local level. It was suggested by the committee that certificates might be given general practitioners who register for and attend the course in Vanderburgh County, which certificates would be recognized by the Board of General Practice as constituting approved graduate study. The chairman of the committee later discussed these problems with the Council, which was meeting at the same time in Indianapolis.

The committee met again at the Columbia Club in Indianapolis on July 11 to discuss the various problems with which it was concerned. Dean Van Nuys was present and also the president of the state medical association, Dr. Cleon A. Nafe, plus each member of the committee. Doctor Van Nuys reported progress with regard to the problems of the medical school, particularly as it concerned the moving of the first year of the medical course to Indianapolis. A good bit of time was spent discussing the faculty reorganization and much time in discussing the new policy to be adopted at the medical school with regard to full-time professors. It was felt by many people, the committee learned, that this new policy constituted a reversal of previous policies with regard to fees for professional services and that it might well lead to abuses which have become all too common in other medical centers. The various methods of handling this situation were reviewed and the committee came to the conclusion that perhaps the program outlined by Doctor Van Nuys had the least faults of any policies which might be adopted regarding this program.

The committee again went on record as urging the Board of Trustees of Indiana University to move the first year of medicine to the Indianapolis campus and wanted to point out that it is practically impossible to get a well balanced preclinical program at Bloomington, nor is it possible to obtain properly trained professors and instructors to handle this preclinical training because of its separation from the main medical school campus. A good bit of discussion and thought was devoted to the problems confronting the various medical schools and particularly the dangers of Federal subsidy and the implications of this. There was a lot of discussion concerning the problem of postgraduate medical education in the state, particularly at the medical school campus and the type of program that was initiated in Vanderburgh County early in the present year. It was felt that this program had been reasonably successful and it was brought out that the average attendance at the programs given in Evansville was 157 and that 77 of these physicians came from outside the city of Evansville. The cost per meeting averaged $128. Thus far, courses had been given in Febrile Diseases, Traumatic Surgery, Obstetrics and Gynecology, Medical Economics and Public Relations, and Atomic Medicine. The committee suggested that the Council give permission for the use of part of the fund allotted the committee to help defray the expense of the Vanderburgh County project. The chairman of the committee subsequently reported these matters to the Council and was given permission to use $400 of the fund for the purpose suggested. The committee chairman attended the meeting of the Council on Medical Education and Hospitals in Chicago in February of this year and also attended a meeting of the State Postgraduate Committees in Chicago during the American Medical Association Meeting.

The committee has worked diligently this year and every member has attended each of its meetings, which is something of a record. The chairman proposes to attend a meeting of the Medical Deans and University Presidents in the fall of this year, at which time the problems of financing medical schools will be foremost in the discussion.

HERMAN M. BAKER, M.D., *Chairman,*
C. J. CLARK, M.D.,
O. O. ALEXANDER, M.D.,
HARRY P. ROSS, M.D.,
HARRY E. KLEPINGER, M.D.,
E. H. CLAUSER, M.D.

COMMITTEE ON PUBLIC RELATIONS

House of Delegates,
Indiana State Medical Association.

Gentlemen:

Your chairman appeared before the Council on April 4, 1948, and again on July 11, 1948, and presented a list of recommendations which had been approved by the Committee on Public Relations. These recommendations appeared on pages 542 and 543 in the May, 1948, JOURNAL, and on page 968 in the September, 1948, JOURNAL.

Among the recommendations, one has been put into effect, through the activity of the secretary, Mr. Ray E. Smith. This is the publication of a monthly news letter from the Indiana State Medical Association office which appears in the form of *"ISMA News Flashes."* These are at present being distributed on a trial basis, for a period of six months, to a group of five hundred members of the association. If it appears that this is going to be a valuable asset to the association and its members mutually, it will be continued and expanded to include the entire roster.

J. NEILL GARBER, M.D., *Chairman.*
JOHN D. VAN NUYS, M.D.,
RUSSELL W. LAVENGOOD, M.D.,
K. L. OLSON, M.D.,
G. S. YOUNG, M.D.,

F. S. Crockett, M.D.,
R. R. Acre, M.D.,
Wemple Dodds, M.D.,
William M. Dugan, M.D.,
R. W. Oliphant, M.D.

AUDITING COMMITTEE

House of Delegates,
Indiana State Medical Association.

Gentlemen:

The Auditing Committee held its annual meeting at the Indiana National Bank, Indianapolis, on July 7, 1948. At this time the investments of the association, as listed by George S. Olive and Company, certified public accountants, in the treasurer's annual report (see pages 1048-1050), were examined and found to be in order in both the General Fund and the Medical Defense Fund.

An additional $5,000.00 from the General Fund was invested in United States Savings Bonds, Series G, in February, 1948, and this amount should be added to the investments listed in the treasurer's report. Total investments of the association therefore are as follows:

General Fund	$36,000.00
Medical Defense Fund	15,000.00
	$51,000.00

Cash balances in the Indiana National Bank, the American National Bank, the Fletcher Trust Company, and the Bankers Trust Company, as shown by the bank statements, also were examined. These accounts consist of the General Headquarters Office Fund, the Medical Defense Fund, The Journal Fund, and the Petty Cash Fund, respectively, and show balances as of June 30, 1948, as follows:

General Fund	$37,881.93
Medical Defense Fund	3,923.98
The Journal Fund	13,678.25
Petty Cash Fund	117.79
	$55,601.95

O. B. Norman, M.D., *Chairman,*
Charles Wise, M.D.,
Claude Dollens, M.D.

COMMITTEE ON CANCER

House of Delegates,
Indiana State Medical Association.

Gentlemen:

Your Committee on Cancer met on May 26 at the Columbia Club, Indianapolis. Present were: Doctors Stayton, Arbogast, Bowers, Berman, Culbertson, and Mr. Weesner, all of Indianapolis; Doctor Rozelle, of Anderson; Doctor Welborn, of Evansville; Doctor Malcolm, of Richmond; and Doctor Bronson, of Terre Haute.

Your chairman, who is also vice-president and chairman of the Executive Committee, Indiana Cancer Society, introduced Mr. Rollis S. Weesner as the executive director of the Indiana Cancer Society. The selection of a full-time director was recommended a year ago by our committee and the Executive Committee of the Indiana State Medical Association. Mr. Weesner spoke briefly of the growth of the cancer movement and some of the problems relative to the service program. He emphasized the fact that all programs entered into by the Cancer Society on all levels had to be approved by the medical profession and reminded the committee that this prerequisite not only placed the direction of the program in the hands of the physicians but also constituted a responsibility which was in keeping with the objectives of the Indiana State Medical Association.

PROGRAM OF EDUCATION

Your chairman outlined the major program of the Cancer Society for the past year, which included a worker's institute held at the Indiana University Medical Center November 17 and 18, with more than 200 physicians and lay cancer workers in attendance; a postgraduate program on cancer on April 7 and 8, again with more than 200 physicians in attendance, and a most outstanding program presented by top-flight physicians in the field of cancer from all over the country; and third, the distribution of the "Indiana Cancer Bulletin" to all members of the state society. This was originally compiled by the Committee on Cancer of the Illinois State Medical Association. The latter project was in cooperation with the medical school, state board of health, and the state medical association. The committee expressed praise to the medical school, board of health and the cancer society for its development and execution of these excellent programs in professional education.

A high school unit textbook entitled, "March Against Cancer," written by Dr. Thurman B. Rice, vice-president in charge of education, with the consultation of a group of high school biology teachers, was reported to have now reached the students in 432 Indiana high schools with approximately 23,000 copies having been distributed. Doctor Rice and his consultation committee revised the text this summer and an increase is expected in its use. It is of interest that this book is in wide demand from other states and in Canada.

RESEARCH PROGRAM

Doctor Clyde Culbertson, who is also a vice-president and chairman of research for the Cancer Society, outlined the projects now being supported by the Cancer Society. These include experimentation in cytology now under way at the medical school, for which $21,000 has been made available through funds raised by the Indiana Elks Association; fundamental research in the chemistry department at Purdue University ($7,500) yearly, also supplied by the Elks Association; a cancer registry being developed cooperatively by the Indiana Association of Pathologists and the board of health, with financial aid of $10,000 from the Cancer Society. This program also includes training of technicians throughout the state in new and advanced laboratory procedures, as well as the collection of unusual

slides and specimens for review by Indiana pathologists.

SERVICE PROGRAM

The following projects are being supported by the Indiana Cancer Society:

Tumor registry clinic research at the medical center	$4,900.00
Fellowships in pathology	3,000.00
Aid in the development of the school of public health, Indiana University Medical School	4,000.00
Health Education with emphasis upon lay cancer education through the board of health	4,000.00
Establishment of a chair of oncology in the Medical School	6,000.00
State cancer registry of pathology	10,000.00
Research at Purdue University (Elks Association funds)	7,500.00

SERVICE PROGRAM BY COUNTIES

Local activities in the various counties throughout the state reveal that ten information centers are now operating where lay people may seek information relative to the symptoms of cancer; may have the services of loan cupboards for bandages, sick room equipment, and advice relative to the many problems and fears that develop in potential cancer victims. These centers are located at Gary, Hammond, East Chicago, South Bend, Fort Wayne, Anderson (Diagnostic only), Richmond, Indianapolis, Terre Haute, Vincennes, Evansville and Elkhart. All of these centers, excepting Vincennes, now employ a full-time person to implement this program. Detection or screening centers where periodic clinics are held for physical examinations are being held in LaFayette, Rensselaer, Anderson, Terre Haute, Evansville, and Henry County. The people receiving services in these clinics in practically all instances are referred by their family physicians and reports in every case are made back to the family physicians. The matter of fees is left to the local medical society and the hospital staff. While these clinics are not yet fully developed detection centers or diagnostic clinics, there is a feeling by the doctors cooperating that they are of educational value and that especially good public relations are being established between the medical profession and the public in these areas.

DIAGNOSTIC CENTERS

With the approval of the Executive Committee and the Council of the Indiana State Medical Association, 13 cities in the state where medical personnel and hospital facilities are available have been invited to establish diagnostic centers. These centers will consist of an information center and hospital diagnostic cancer clinics following the pattern outlined by the American College of Surgeons. The development of such centers will, of course, be the responsibility of the local cancer societies. The centers tentatively selected are: Indianapolis, Hammond, East Chicago, or Gary in Lake County, South Bend, Fort Wayne, Terre Haute, Evansville, Muncie, Anderson, Columbus, Crawfordsville, Shelbyville, Marion and LaFayette. The individual hospital clinics will be the responsibility of the hospital staff society and the county medical society in the county where the hospital is located.

The lay educational activities of the Cancer Society through its county units is well known to you. Approximately 1,500,000 pieces of literature were distributed in Indiana this year and you all are familiar with the volume of newspaper and magazine publicity on the subject of cancer.

NATIONAL TRAINING SCHOOL AT NEW YORK CITY

The American Cancer Society conducted a four-weeks training institute for lay workers in the state and for physicians who are interested in cancer control. Dr. James C. Katterjohn, who was selected as the medical representative of the Indiana Cancer Society, and Mrs. James Cloetingh, Director of Volunteer Service, and Mr. Rollis S. Weesner, the executive director, attended the institute for lay workers. Mrs. Florence Franzen of Bloomington was invited by the American Cancer Society to speak to the lay workers of the institute on the "Secondary School Program in Indiana."

BOARD OF DIRECTORS

For the year 1948-1949 the Indiana Cancer Society will have fifteen physicians, one dentist and three Ph.D's on its Board of Directors. A contemplated change in the construction of the board for the future will assure an equal representation of medical and lay directors from the various sections of the state. Mr. William H. Ball of Muncie continues as president of the society, with Mrs. James H. Cloetingh of South Bend as Chairman of Voluntary Services, usually referred to as Commander of the Field Army. Drs. Chester A. Stayton, Clyde G. Culbertson, Thurman B. Rice and Donald D. Bowers are officers of the society. On the board are Drs. John Van Nuys, Leroy Burney, E. E. Padgett, J. K. Berman, all of Indianapolis; Paul J. Bronson, of Terre Haute; Frank M. Scott, South Bend; Mell Welborn, Evansville; Donald W. Schafer, Fort Wayne; C. V. Rozelle, Anderson; Russell Malcolm, Richmond; and C. E. Frankowski, Whiting.

CAMPAIGNS FOR FUNDS

At the date of this report, August 27, 1948, $313,-294.59 has been reported as the state's contribution in the 1948 campaign for funds. This does not include $54,000 raised by the Elks Association through their own membership, the expenditure of which is controlled by the Cancer Society. The Lions Clubs in the state also have an undisclosed amount of money which is being held in escrow for diagnostic equipment at the medical school when the building program is completed. The division of campaign funds, as in the past years, is on a 40-40-20 basis, 40 percent going to the national program, 40 percent remaining in the local county units, and 20 percent for the administration, education and research programs of the state society. Of

monies sent to the national organization for research, $26,000 was returned to Indiana this year in the form of grants for experimentation in genetics by H. J. Muller, Ph.D., Professor of Zoology, Indiana University, and in bacterial virus by S. E. Luria, M.D., Associate Professor of Bacteriology, Indiana University. Since 1945 more than $6,000,000 has been spent by the American Cancer Society in its research program.

In general review of the activities and program for the control of cancer, your committee was of the unanimous opinion that great good was being accomplished, particularly in the wider knowledge of the symptoms of cancer by the general public, and the wise development of service and research projects which bring increased professional knowledge and new skills. Your committee furthermore recommends that the members of the Indiana State Medical Association cooperate enthusiastically with the efforts of lay people in every community to make the results of their efforts and contributions of the greatest possible value against the disease of which we are all becoming more and more apprehensive. Doctors need not fear encroachment upon their prerogatives or abuse of the private practice philosophy of medicine if they give the guidance which the lay people need and want in this movement.

C. A. Stayton, Sr., M.D., *Chairman,*
C. V. Rozelle, M.D.,
Mell B. Welborn, M.D.,
L. G. Montgomery, M.D.,
R. L. Malcolm, M.D.,
P. J. Bronson, M.D.,
D. C. McClelland, M.D.,
Frederic W. Taylor, M.D.

COMMITTEE ON CENTENNIAL CELEBRATION AND HISTORY

House of Delegates,
Indiana State Medical Association.

Gentlemen:

The work of this committee for the past four years has been chiefly concerned with the writing of the Centennial Volume and it is now and at last ready for the printers.

The Table of Contents is as follows:

"100 Years of Indiana Medicine"
Centennial Volume
Indiana State Medicial Association
about 400 pages 4 x 9 (175,000 words)
Table of Contents

Preface — Dr. R. L. Sensenich
Indiana State Medical Association, including comments by Thomas Hendricks, Dr. Floyd Romberger and Dr. Homer Hamer, and the Biographies and Photographs of all the Presidents — Dr. Charles N. Combs
Journal of the Indiana State Medical Association — Dr. E. M. Shanklin and Ray E. Smith
The Woman's Auxiliary — Mrs. F. S. Cuthbert, Kokomo
The Last Survivor of the 1849 Convention — Miss Elizabeth Wishard
Pioneer Medicine in Indiana — Mrs. Dorothy Russo
Medical Education in Indiana, abstracted and edited by Dr. E. F. Kiser — Dr. B. D. Myers
Indiana State Board of Health — Dr. T. B. Rice
Board of Medical Registration — Miss Ruth Kirk, Secretary of Board
Regulation of the Practice of Medicine — Mr. Albert Stump
Indiana Doctors in Wars
Up to 1914 — Mrs. Dorothy Russo
World War I — Dr. W. D. Inlow
World War II — Dr. Charles F. Thompson
Care of the Insane in Indiana — Dr. Max Bahr
Nursing Education in Indiana — Miss Dotaline Allen, Indiana University
Pharmacy in Indiana — Dean G. L. Jenkins, Purdue University
Social Service in Indiana — Mr. Robert Neff, Superintendent Methodist Hospital
Reprint of Dr. Bobbs' Article, with biography
Bibliography of Indiana Medicine — Mrs. Dorothy Russo

At the last meeting of the Council it was decided to sell these books for $2.00 each. Instead of giving away a book to each member, it was the opinion that if a member really wanted to read and preserve the book he would be willing to pay most of the cost of printing it. We expect every delegate to buy one and hope that he will induce ten others to do likewise. The twenty different contributors have spent a lot of time in writing the book and we trust that the sales will justify the effort.

One member of our committee, Dr. A. P. Hauss, has outlined an elaborate and comprehensive program for the actual celebration in 1949, and the Council has granted Doctor Hauss, as the next president, permission to name his Celebration Committee at the present time so that it may proceed at once to perfect the plans. The Council also concurred in our recommendation that all essayists for the 1949 program be Hoosier born or Hoosier educated.

Charles N. Combs, M.D., *Chairman,*
Edgar F. Kiser, M.D., *Vice-Chairman,*
L. G. Zerfas, M.D.,
Augustus P. Hauss, M.D.,
A. C. Yoder, M.D.,
V. L. Turley, M.D.,
J. B. Maple, M.D.,
William N. Wishard, Jr., M.D.,
M. C. Pitkin, M.D.,
W. D. Gatch, M.D.

COMMITTEE ON CONSERVATION OF VISION

House of Delegates,
Indiana State Medical Association.

Gentlemen:

As it has been the custom for the past few years, the Committee on Conservation of Vision sponsored the May issue of The Journal by furnishing several very practical and informative articles dealing with conservation of vision.

Because of adverse criticism expressed in several articles published in lay magazines in regard to the long established and generally accepted Crede method of prophylaxis in the newborn, the Committee on Conservation of Vision and the Commit-

tee on Maternal and Child Health held a joint meeting on May 5, 1948, at the request of the Director, Bureau of Preventive Medicine, Indiana State Board of Health, to consider the desirability of any revision in the state board of health regulation regarding prophylaxis against ophthalmia neonatorum. As a result of the joint meeting of the two committees, it was decided that the Crede method be continued as it has in the past until better proven acceptable methods are developed.

The committee has made arrangements to hold a breakfast meeting on Conservation of Vision at the time of the state meeting in Indianapolis, to which all members of the state and county conservation of vision committees are cordially invited. The guest speaker for this occasion will be John M. McLean, M.D., New York City. The meeting will be held at 7:30 a.m., Wednesday, October 27, 1948, in Parlors D and E, Indianapolis Athletic Club.

EUGENE L. BULSON, M.D., *Chairman*,
C. W. RUTHERFORD, M.D.,
RICHARD P. GOOD, M.D.,
H. BROOKS SMITH, M.D.,
WILLIAM M. COCKRUM, M.D.

COMMITTEE ON CONSTITUTION AND BY-LAWS

House of Delegates,
Indiana State Medical Association.

Gentlemen:

This committee was appointed by Dr. Cleon A. Nafe, president, pursuant to the action of the House of Delegates in the 1947 annual convention, which is reported in full in the December, 1947, issue of THE JOURNAL. Under the terms of its appointment the committee is required to submit in this report the resolutions for amendments to the Constitution and By-Laws which would be necessary to effectuate the recommendations contained in the presidential address of Dr. Floyd T. Romberger. By implication of all the matters that transpired in the meeting of the House of Delegates which authorized the appointment of this committee, the committee understood that it has the further duty to make whatever recommendations it may care to make with respect to whether or not the recommendations incorporated in Doctor Romberger's address should be adopted by the association; and also to make whatever suggestions and recommendations the committee would deem necessary to bring the Constitution and By-Laws up-to-date. It therefore submits its report in two parts: the first includes changes that will be necessary to incorporate Doctor Romberger's suggestions, as well as the recommendation of the committee in regard to those suggestions; and the second includes the recommendations of this committee regarding the entire revision of the Constitution and By-Laws to bring them up-to-date and to make them consistent with the practices that have developed within the association as a result of experience.

PART I.

A.

RESOLUTIONS WHICH WOULD BE NECESSARY TO AMEND THE CONSTITUTION IN ACCORDANCE WITH DOCTOR ROMBERGER'S RECOMMENDATION

1.

Resolved, That Article VIII, Section 2, of the Constitution of the Indiana State Medical Association be amended to read as follows:

Sec. 2. The House of Delegates shall fix the time and place for holding the next two annual conventions, and thereafter in each annual convention shall fix a time and place for holding the annual convention two years in advance of such annual convention.

2.

Resolved, That Article IX, Section 1, of the Constitution be amended to read as follows:

Section 1. The officers of this Association shall be a President, a Vice-President, a President-elect, a Speaker of the House, an Executive Secretary, a Treasurer, and thirteen Councilors, each of whom shall be a member, except the Executive Secretary, who need not be either a physician or a member.

B.

AMENDMENTS TO BY-LAWS NECESSARY IF ASSOCIATION HAS A VICE-PRESIDENT

(1) *Resolved,* That Chapter VI be amended by adding a new section to be numbered Section 2, and by renumbering the present Section 2 as Section 3, and the remaining sections accordingly, and that the new Section 2 read as follows:

Sec. 2. The duties of the Vice-President shall be to assist the President, and to succeed to that office upon the death, resignation or removal of the President from office; and, in assisting the President, to aid in the routine visits to the District and County Societies, to appear before and consult with allied health bodies, and to preside at scientific sessions and be present at section meetings,—all as requested by the President. The Vice-President shall be engaged in the active practice of medicine. He shall not be eligible to be elected President-elect during the year of nor the year following his term of office as Vice-President. He shall be elected annually by the House of Delegates to serve for the ensuing year.

(2) *Be It Further Resolved,* That the renumbered Section 3 of Chapter VI be amended to read as follows:

Sec. 3. The President-elect's term of office shall be one year, at the completion of which he succeeds to the presidency. While President-elect, he shall assist the President in the discharge of his duties as requested by the President.

C.

AMENDMENTS TO BY-LAWS NECESSARY IF THE ASSOCIATION HAS A SPEAKER OF THE HOUSE OF DELEGATES

Be It Resolved, That Chapter VI of the By-Laws be amended by adding thereto an additional section properly numbered to read as follows:

Sec. —.—The speaker of the House shall be elected annually by the House of Delegates to serve during the ensuing year. He shall not be eligible to be elected President-elect during the year of his service nor the following year, but shall be eligible for reelection from year to year. He shall preside over the House of Delegates whenever it is in session. He shall consult with the President and Executive Secretary regarding the organization of the House, and shall be responsible for such organization, especially with regard to the presidentially appointed reference committees.

D.

COMMENT OF COMMITTEE ON ABOVE SUGGESTIONS AS TO AMENDMENTS TO CONSTITUTION AND BY-LAWS

The committee has made a study of the resulting situation if the above amendments are made to the Constitution and By-Laws and does not recommend that they be made. This does not mean that Doctor Romberger's suggestions are all rejected by this committee. This committee has incorporated certain of his suggestions in the second part of this report but it has not incorporated those that have to do with having a Vice-President and a Speaker of the House. The committee believes that the President-elect serves all the purposes suggested in the address of Doctor Romberger which could be served by a Vice-President and it believes further that a Speaker of the House is unnecessary since the President has the right to call on anyone to preside, and the sectional meetings may properly be presided over by the section officers.

E.

RECOMMENDATIONS OF THE COMMITTEE

For the above briefly stated reasons the committee recommends that the amendments to the Constitution and By-Laws stated under Part I of this report be not adopted. The committee also recommends that this Part I be acted upon separately from Part II of this report.

PART II.

AMENDMENTS RECOMMENDED BY COMMITTEE ON CONSTITUTION AND BY-LAWS OF THE INDIANA STATE MEDICAL ASSOCIATION

The existing Constitution and By-Laws have been incorporated in this copy in their current form. Where changes are suggested, the suggested change follows the Article or Section to which it pertains. Words, phrases, sentences, or paragraphs which are to be replaced or abolished are inclosed in parentheses, while the newly proposed amendments are printed in bold face type.

CONSTITUTION AND BY-LAWS OF THE INDIANA STATE MEDICAL ASSOCIATION

ARTICLE I—NAME OF THE ASSOCIATION

The name and title of this organization shall be the Indiana State Medical Association.

ARTICLE II—PURPOSES OF THE ASSOCIATION

The purposes of this Association shall be to federate and bring into one compact organization the (entire) medical profession of the State of Indiana, and to unite with similar societies of other states to form the American Medical Association; to extend medical knowledge and advance medical science; to elevate the standard of medical education and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to protect its members against imposition; and to enlighten and direct public opinion in regard to the great problems of (state medicine,) **medical care,** and public health, so that the profession shall become more capable and honorable within itself and more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life.

ARTICLE III—COMPONENT SOCIETIES

Component societies shall consist of those county medical societies which hold charters from this Association.

ARTICLE IV—COMPOSITION OF THE ASSOCIATION

(Section 1.—This Association shall consist of Members, Delegates, Guests, and Associate and Honorary Members.)

Section 1—This Association shall consist of Active Members, Associate Members, Senior Members, and Honorary Members.

(Sec. 2.—*Members*—The members of this Association shall be the members of the component county medical societies. Membership in a county medical society on a basis not including membership in the Indiana State Medical Association is not recognized.)

Sec. 2.—*Active Members*—**The active members of this Association shall be the members of the component county medical societies, and no county medical society shall grant membership therein on a basis that does not include membership in the Indiana State Medical Association.**

(Sec. 3.—*Delegates.*—Delegates shall be those members who are elected in accordance with this Constitution and By-Laws to represent their respective component societies in the House of Delegates of this Association.)

—Sec. 3, above, is to be omitted. The present Sec. 4, therefore, will become Sec. 3.—

Sec. 3.—*Associate Members*—Members of the Indiana State Dental Association in good standing are, by virtue of their membership therein, made associate members of the Indiana State Medical Association.

(Sec. 5.—*Honorary Members*—Honorary members shall consist of representative teachers and students of science allied to medicine and of physicians and surgeons of distinction not members of the Indiana State Medical Association, who may by vote of the House of Delegates be elected to honorary membership; and any physician of the State of Indiana who has attained the age of seventy-five years and has held membership in the Indiana State Medical Association for twenty years or more may be elected to honorary membership by vote of the House of Delegates, provided his name be proposed for such honorary membership by the county medical society of which such physician is a member.)

Sec. 4—*Senior Members*—**Senior members shall be physicians of the State of Indiana who have attained the age of seventy-five years and have held member-**

ship in the Indiana State Medical Association for twenty years or more, and who, upon their application, have been certified to the executive secretary as eligible for such membership by the county societies of which they are members.

All members who, previous to the adoption of this amendment to the constitution, were certified as honorary members on the basis of the above qualifications, shall hereafter be classified as senior members.

Sec. 5.—*Honorary Members*—**Honorary members shall consist of teachers, scientists and others who have rendered highly meritorious service to the profession of medicine, and of physicians and surgeons of distinction, upon whom the Association may, through vote of the house of delegates, desire to confer such membership as a special honor.**

(Sec. 6.—*Guests.*—Any distinguished physician not a resident of this state who is a member of his own State Association may become a guest during any Annual Session on invitation of the officers of this Association, and shall be accorded the privilege of participating in all of the scientific work for that session.)

Sec. 6.—Rights and Privileges of Members.—Active members and senior members shall have the same rights and privileges except as follows:

a. Senior members shall not be required to pay membership dues in the State Association.

b. If Senior Members desire to receive "The Journal" of the State Association, they shall pay the regular subscription fees therefor.

c. Honorary Members hereafter elected shall hold such membership as an honor and distinction and shall have the right to attend meetings of the Association. They shall have the privilege of participating in discussions but shall have no right to vote or to hold office. They shall not be required to pay membership dues in the State Association.

ARTICLE V—HOUSE OF DELEGATES

The house of Delegates shall be the legislative and business body of the Association and shall consist of (1) Delegates elected by the component county societies; (2) the Councilors; **and** (3) the ex-presidents of the Indiana State Medical Association. **The following shall be ex officio members:** the President, the President-elect, the Executive Secretary, the Treasurer of this Association, and the delegates to the American Medical Association, all without power to vote, except in case of a tie vote, when the President **or person presiding** shall cast the deciding vote.

ARTICLE VI—COUNCIL

The Council shall consist of (1) the Councilors, and (2) *ex officio* the President, President-elect, (Executive Secretary) and Treasurer. Besides its duties mentioned in the By-Laws, it shall constitute the Board of Trustees of this organization, having full charge and control of all the property of the Association. It shall have full authority and power of the House of Delegates between sessions of the House of Delegates, except that it shall not make changes in the laws governing the Association nor exercise legislative functions, except as stated in the By-Laws, and at all times shall be the finance committee of the Association. (Five) **Seven** Councilors shall constitute a quorum.

ARTICLE VII—SECTIONS AND DISTRICT SOCIETIES

The house of Delegates may provide for a division of the scientific work of the Association into appropriate sections and for the organization of such Councilor District Societies as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies.

(ARTICLE VIII—SESSIONS AND MEETINGS)

(Section 1.—The Association shall hold an Annual Session during which there shall be held daily general meetings and such section meetings as may be provided for, all of which shall be open to all registered members and guests.)

ARTICLE VIII—CONVENTIONS AND MEETINGS

Section 1.—The Association shall hold an Annual Convention during which there shall be held such general and section meetings as the Association through its duly constituted officers and committees may provide for.

(Sec. 2.—The time and place for holding each Annual Session shall be fixed by the House of Delegates at the preceding Annual Session.)

Sec. 2.—The House of Delegates shall select the place for two years in advance for holding the annual conventions. The time for the conventions shall be fixed by the Council, and the Council shall have the power also to change the place for holding the convention where conditions may create difficulties in holding a successful convention at the place designated by the House of Delegates.

Sec. 3.—Special (sessions) **meetings** of either the Association or the House of Delegates shall be called by the President on petition of twenty delegates or fifty members.

ARTICLE IX—OFFICERS

Section 1.—The officers of this Association shall be a President, a President-elect, an Executive Secretary, a Treasurer, and thirteen Councilors, each of whom shall be a member, except the Executive Secretary, who need not necessarily be either a physician or a member.

Sec. 2.—The officers, except the Councilors and the Executive Secretary, whose election has been provided for hereinafter, shall be elected annually. The terms of elected Councilors shall be for three years and approximately one-third of the number shall be elected annually. All of these officers shall serve until their successors are elected and installed. **Provided, that if any elected Councilor fails, without reason acceptable to the Council, in any one Calendar year to attend a majority of the meetings of the Council, he shall thereby cease to be a Councilor, and the Executive Secretary shall thereupon take action in accordance with section 4 of this article.**

Sec. 3.—The officers of this Association **with the exception of the Executive Secretary** shall be elected by the House of Delegates (on the morning) **as the first order of business** of the last day of the Annual (Session) **Convention,** and no person shall be elected to any such office who is not in attendance on that Annual (Session) **Convention** and who has not been a member of the Association for the preceding two years.

Sec. 4.—The Councilors shall be elected by the respective district societies, provided that if any district fails to meet and elect its Councilor by the time of expiration of the incumbent's term of office, the Executive Secretary of the Association shall cause a special meeting to be called by said district society for the purpose of such election.

Sec. 5.—Any officer may be removed from office after a hearing before the Council, on thirty days' notice, on charges in writing, upon a vote of three-fourths of the members of the Council.

Sec. 6.—In event of the death, resignation, removal, or disability of the President, the President-elect shall succeed to the presidency. In the event of the death, disability, resignation, removal, or disability of both the President and the President-elect, the chairman of the Council shall become president pro tem and as such shall, within a period of sixty days, call a special session of the members of the House of Delegates for the purpose of electing members to fill these vacancies, who shall serve until the next regular meeting of the House of Delegates, at which

time both a President and a President-elect shall be elected, both of whom shall take office immediately upon their election.

Sec. 7.—A vacancy in the office of Treasurer shall be filled by an election by the Councilors at the next regular meeting of the Council following the occurrence of such vacancy.

Sec. 8.—None of the officers shall receive compensation except the Executive Secretary, who shall be employed by the Council, and the Council shall fill any vacancy in that office.

ARTICLE X—RECIPROCITY OF MEMBERSHIP WITH OTHER STATE SOCIETIES

In order to broaden professional fellowship, this Association is ready to arrange with other State Medical Associations for an interchange of certificates of membership so that members moving from one state to another may avoid the formality of re-election.

(ARTICLE XI—FUNDS AND EXPENSES)

(Funds shall be raised by an equal per capita assessment on each component society. The amount of the assessment shall be fixed by the House of Delegates. Funds also may be raised by voluntary contributions, from the Association's publications, and in any other manner approved by the House of Delegates. Funds may be appropriated by the House of Delegates to defray the expenses of the Association, for publication, and for such other purposes as will promote the welfare of the profession. All motions and resolutions appropriating funds must be referred to the Council for approval before final action is taken thereon.)

ARTICLE XI—INCOME AND EXPENSES

Funds for carrying on the activities of this Association shall be raised by the following means:

a. Membership dues to be collected by the component county societies in connection with the dues for such component societies. The amount of the dues of each component society shall be fixed by the society itself; and the amount of dues for this Association shall be fixed from time to time by the House of Delegates.

b. Voluntary contributions.

c. Revenues derived from the Association's publications.

d. Any other manner approved by the House of Delegates.

Funds may be appropriated by the House of Delegates to defray the expenses of the Association, for publications, and for such other purposes as will promote the welfare of the profession. All motions and resolutions appropriating funds must be referred to the council for approval before final action is taken thereon.

ARTICLE XII—REFERENDUM

Section 1.—A General Meeting of the Association may, by a two-thirds vote of the members present, order a general referendum on any question pending before the House of Delegates, and when so ordered the House of Delegates shall submit such question to the members of the Association, who may vote by mail or in person, and if the members voting shall comprise a majority of all the members of the Association, a majority of such vote shall determine the question and be binding on the House of Delegates.

Sec. 2.—The House of Delegates may, by a two-thirds vote of its own members, submit any question before it to a general referendum, as provided in the preceding section, and the result shall be binding on the House of Delegates.

ARTICLE XIII—THE SEAL

The Association shall have a common Seal, with power to break, change or renew the same at pleasure.

ARTICLE XIV—AMENDMENTS

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates present at any Annual (Session) **Convention,** provided that such amendment shall have been presented in open meeting at the previous Annual (Session) **Convention,** and that it shall have been published twice during the year in THE JOURNAL of this Association.

BY-LAWS

CHAPTER I—MEMBERSHIP

Section 1.—The term "Member" as used in these By-Laws unless otherwise indicated shall mean both active and senior members.

(Section 1.) Sec. 2.—Any physician who is a member in good standing of a component county society and who has paid to this Association his annual dues is a member in good standing of the Indiana State Medical Association.

(Sec. 2.) Sec. 3.—No person who is under sentence of suspension or expulsion from a component society, or whose name has been dropped from its roll of members, shall be entitled to any of the rights or benefits of this Association, nor shall he be permitted to take part in any of its proceedings until he has been relieved of such disability.

(Sec 3) Sec. 4.—Each member in attendance at the Annual (Session) **Convention** shall register by indicating the component society of which he is a member. When his right to membership has been verified, by reference to the roster of his society, he shall receive a badge, which shall be evidence of his right to all the privileges of membership at that (session) **Convention.** No member shall take part in any of the proceedings of an Annual (Session) **Convention** until he has complied with the provisions of this section.

CHAPTER II—GENERAL MEETINGS

(Section 1.—All registered members may attend and participate in the proceedings and discussions of the General Meetings and the meetings of the sections. The General Meetings shall be presided over by the President or by the President-elect, and before them shall be delivered the address of the President and the orations, unless the Committee on Scientific Work, with the sanction and approval of the officers, shall arrange otherwise.)

Section 1.—General Meetings shall mean all meetings planned for attendance by all registered members, and shall include those meetings in which guests of registered members or the general public are also invited. The address of the President shall be delivered in a General Meeting, and the programs of General Meetings shall be arranged by the Executive Committee except where scientific papers are included, in which event the scientific part of the program shall be arranged by the Committee on Scientific Work, with the sanction and approval of the officers.

Sec. 2.—The General or Section Meetings may recommend to the House of Delegates the appointment of committees or commissions for scientific investigation of special interest and importance to the profession and public.

(Sec. 3.—No address or paper before the Association, except those of the President and orators, shall occupy more than twenty minutes in its delivery; and no member shall speak longer than five minutes nor more than once on any subject, except by unanimous consent, except the first discussant, who shall be allowed ten minutes.)

(Sec. 4.) Sec. 3.—All scientific papers read before the Association or any of the sections shall become its property and shall not be published in any but the official publications of this Association, except by consent of the officers and the Editorial Board of this Association. Each such paper shall be deposited with the Executive Secretary when read.

(Sec. 5.—The Indiana State Medical Association shall appropriate from its funds the sum of Five Hundred Dollars ($500) annually for the entertainment of its members and guests, this money to be expended at the direction of the President, Executive Secretary, and Treasurer of the State Association, and the Chairman of the Entertainment Committee, who is appointed annually by the President of the Association. All money in excess of that expended for actual expenses incurred at that session is to revert each year to the treasury of the State Association.)

Sec. 4.—The Council shall appropriate from the funds of the Association for each annual convention, for the entertainment of its members and guests, such an amount as in the discretion of the Council shall be reasonably needed for that purpose, and no commitments shall be made for expenses in excess of the amount appropriated for such convention. The entertainment funds so appropriated shall be expended at the direction of the Committee on Convention Arrangements, appointed by the president for the convention for which the appropriation is made. All money in excess of that expended for actual expenses incurred shall revert each year to the treasury of the State Association.

CHAPTER III—SECTIONS

(Section 1.—During the Annual Session the Association may meet in the following sections:

a. Surgical.
b. Medical.
c. Eye, Ear, Nose, and Throat.
d. Anesthesia.
e. Any other sections that hereafter may be provided for by the House of Delegates.)

Section 1.—During the Annual Convention the Association in addition to the General Meetings may hold the following Section Meetings:

a. Surgical.
b. Medical.
c. Eye, Ear, Nose, and Throat.
d. Anesthesia.
e. General Practice.
f. Obstetrics and Gynecology.
g. Any other sections that hereafter may be provided for by the House of Delegates.

Sec. 2.—The officers of each section shall be a Chairman, a Vice-Chairman, and a Secretary, and they shall preside over the meetings of the sections and shall be responsible to the Committee on Scientific Work for the section speakers and papers.

Sec. 3.—The election of officers of the sections shall be the (first) last order of business of the last meeting of the sections during the Annual (Session) Convention.

Sec. 4.—No section meeting shall be allowed to conflict with a general meeting.

CHAPTER IV—HOUSE OF DELEGATES

Section 1.—The House of Delegates shall meet the day before or during that fixed as the first day of the scientific meeting of the Annual (Session) Convention. It may adjourn from time to time as may be necessary to complete its business, provided that its hours shall conflict as little as possible with the General or Section Meetings. It shall meet on the (morning of the) last day of the Annual (Session) Convention for the election of officers for the ensuing year, and for the completion of any business previously introduced. The order of business shall be arranged as a separate section of the program.

Sec. 2.—Each component county society shall be entitled to send to the House of Delegates each year one Delegate for every fifty members and one for each major fraction thereof; but, irrespective of the number of members, each component society which has made its annual report and paid its assessments, as provided in this Constitution and By-Laws, shall be entitled to one delegate, except that where a component society is made up of physicians of more than one county, each county shall be entitled to at least one delegate to be selected by the physicians residing in such county.

The names of duly elected delegates and alternates from each component society shall be sent to the Executive Secretary of this Association annually on or before (June) August first prior to the Annual (Session) Convention at which such delegates are to serve. No one shall be entitled to a seat in the House of Delegates unless his credentials as a delegate or alternate, properly signed by the (President and) secretary of his county society, be presented to the Committee on Credentials at the time of the Annual (Session) Convention. (If any component county medical society is without representation at the end of the roll call, then the members registered in attendance from that county may select from their number a delegate to serve until the regular delegate or alternate appears, and any delegate so named must receive a vote of affirmation from the House of Delegates before he can be seated.)

Sec. 3.—(Twenty) Fifty delegates shall constitute a quorum.

(Sec. 4.—It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body.)

(Sec. 5.—It shall divide the state into Councilor Districts, specifying what counties each district shall include, and when the best interests of the Association and profession will be promoted thereby, organize in each district a medical society, and all members of component county societies, and no others, shall be members of such district societies.)

(Sec. 6.—It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates. Such committees shall report to the House of Delegates, and the members of such committees may be present and participate in the debate on their reports.)

(Sec. 7.—It shall approve all memorials and resolutions issued in the name of the Association before the same shall become effective.)

Sec. 4.—The House of Delegates shall:

a. Elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body.

b. Divide the State into Councilor Districts, Specifying what counties each district shall include, and when the best interests of the Association and profession will be promoted thereby, organize in each district a medical society, and all members of component county societies, and no others, shall be members of such district societies.

c. Have authority to appoint committees for special purposes from among members of the Association who need not be members of the House of Delegates. Such committees shall report to the House of Delegates, and the members of such committees may be present and participate in the debate on their reports.

d. Approve all memorials and resolutions issued in the name of the Association before the same shall become effective.

(Sec. 8.) Sec. 5.—Funds may be appropriated by the House of Delegates, subject to approval by the Council, for such purposes as will promote the welfare of the Association and the profession.

(Sec. 9.—At the first meeting the President shall appoint from among the members of the House of Delegates, Reference Committees, as hereinafter provided for, and any other committees considered by him necessary to expedite the business of the Association.)

Sec. 6.—At the first meeting the President shall announce the membership of the Reference Committees, as hereinafter provided for, and any other committees considered by him necessary to expedite the business of the Association.

CHAPTER V—ELECTION OF OFFICERS

Section 1.—The election of officers shall be the first order of business of the House of Delegates after the reading of the minutes on the (morning of the) last day of the Annual (Session) **Convention.**

Sec. 2.—All elections shall be by ballot, and a majority of the votes cast shall be necessary to elect. In case no nominee receives a majority on the first ballot, the nominee receiving the lowest number of votes shall be dropped and a new ballot taken.

Sec. 3.—Any person known to have solicited votes for or sought any office within the gift of this Association shall be ineligible for any office for two years.

Sec. 4.—The term of office, unless otherwise specified, shall be for tne (fiscal) **calendar** year following the date of election, **except as to the President and President-Elect who shall take office and be installed in such offices in the last meeting of the Annual Convention.**

CHAPTER VI—DUTIES OF OFFICERS

Section 1.—The President, **or a member designated by him,** shall preside at all General Meetings of the Association and of the House of Delegates. **The President** shall appoint all committees not otherwise provided for; he shall deliver an annual address at such time as may be arranged by the (Scientific or Program) **Executive** Committee, and **shall** perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the state during his term of office, and as far as practicable, shall visit by appointment the various sections of the state and assist the Councilors in building up the county societies and in making their work more practical and useful.

Sec. 2.—The President-elect's term of office shall be for one year, at the completion of which he succeeds to the presidency. While President-elect, he shall assist the President in the discharge of his duties. (In the event of the President's death, resignation or removal, the President-elect shall succeed him in office.)

Sec. 3.—The Treasurer shall give bond at the expense of the Association in such an amount as shall be required by the Council. (He shall demand and receive all funds due the Association, except accounts due THE JOURNAL in the conduct of its business, together with bequests and donations.) **He shall receive all bequests and donations to the Association and shall demand and receive all funds due the Association except accounts due THE JOURNAL in the conduct of its business.** He shall pay money out of the treasury only on a written order by the President, countersigned by the Chairman of the Council. He shall present to the House of Delegates annually a report of the receipts and expenditures, and the state of the funds in his hands, and shall subject his accounts to (such examination as the House of Delegates may order.) **an annual audit by a Certified Public Accountant.**

(Sec. 4.—The Executive Secretary shall attend the General Meetings of the Association, and the meetings of the House of Delegates and the Council, and shall keep minutes of their respective proceedings in separate record books. He shall be Secretary of all committees of the Association, assist them in the performance of their duties and keep a record of their proceedings. He shall, under instructions from the Bureau or Committee on Publicity, issue and send to lay publications such educational articles as may be prepared and authorized for general publication, and secure and assign medical speakers to address, on invitation, lay organizations on subjects pertaining to individual or community health. He also shall whenever requested, assist any of the component societies of the Association in securing speakers or otherwise preparing a program for special meetings; he shall at all times hold himself in readiness to advise and aid, so far as practicable, any and all officers or committees of the Association in the performance of their duties or to carry out any of the purposes or policies of the Association. He shall be custodian of all record books and papers belonging to the Association, except such as properly belong to the Treasurer, and shall keep account of and promptly turn over to the Treasurer all funds of the Association which come into his hands. He shall be bonded at the expense of the Association in such an amount as shall be required by the Council. He shall provide for the registration of the members and delegates at the Annual Session. He shall, with the co-operation of the secretaries of the component societies, keep a card-index register of all the legal practitioners of the state by counties, noting on each his status in relation to his county society, and, on request, shall transmit a copy of this list to the American Medical Association. He shall report promptly memberships and proceedings or reports of the House of Delegates, the Council, or any committees of the Association to the Editor of THE JOURNAL for publication. He shall aid the Councilors in the organization and improvement of the county societies and in the extension of the power and usefulness of this Association. He shall conduct the official correspondence, notifying members of meetings, officers of their election, and committees of their appointment and duties. He shall employ such assistants as may be ordered by the Council, and shall make an annual report to the House of Delegates. He shall supply each component society with the necessary blanks for making their annual reports; shall keep an account with the component societies, charging against each society its assessments, collect the same, and at once turn it over to the Treasurer. Acting with the Committee on Scientific Work and the Editor of THE JOURNAL, he shall prepare and issue all programs. The amount of his salary shall be fixed by the Executive Committee on approval of the Council.)

Sec. 4.—The Executive Secretary shall be the directing manager of the Association's Headquarters and Journal offices, and shall supervise the work of all salaried employees in the Association offices. Such supervision shall be subject to directives from the House of Delegates, the Council, the Executive Committee, and the President of the Association. He shall discharge the administrative functions of the Association not within the duties of other officers or of committees to perform. He shall assist, at their request, all officers and committees, and shall keep himself informed in regard to non-professional mat-

ters affecting the medical profession, for the purpose of keeping himself qualified to perform the services herein mentioned. He shall be responsible for the execution and carrying out of the policies of the Association and in that connection shall perform all specific tasks committed to him by the Committees, the Council, and the Officers of this Association. The amount of his salary shall be fixed by the Executive Committee on approval of the Council.

Sec. 5.—The necessary expenses of the above officers incurred in the line of duty herein imposed may be allowed by the Council, but excepting the Executive Secretary, this shall not include the expense of attending the Annual (Session) **Convention.**

CHAPTER VII—COUNCIL

Section 1.—The Council shall meet as follows: 1. January, April, and July of each year on dates and at places fixed by the Council. 2. On the day preceding the first day for the scientific meetings of the Annual (Session) **Convention** of the Association. 3. On the last day of the Annual (Session) **Convention** of the Association after the adjournment of the House of Delegates. 4. At such other times as necessity may require, subject to the call of the Chairman, or on petition of three Councilors. It shall hold no meeting that will conflict with any meeting of the House of Delegates. It shall elect a Chairman; and a Clerk, who, in the absence of the Executive Secretary of the Association, shall keep a record of its proceedings. It shall, through its Chairman, make an annual report to the House of Delegates. (Five Councilors shall constitute a quorum for the transaction of business.)

Sec. 2.—Each Councilor shall be organizer, peacemaker, and censor for his district. He shall visit the counties in his district at least once a year for the purpose of organizing component societies where none exist; for inquiring into the condition of the profession, and for improving and increasing the zeal of the county societies and their members. He shall make an annual report of his work and of the condition of the profession of each county in his district, the same to be published in the number of THE JOURNAL which is issued immediately preceding the Annual (Session) **Convention,** (and the report should be approved by the House of Delegates, with such recommendations as seem indicated.) **The House of Delegates may take such action, if any, as it deems appropriate upon such reports.** The necessary expenses incurred by such Councilor in the line of the duties herein imposed may be allowed by the Council on a properly itemized statement, but this shall not be construed to include his expense in attending the Annual (Session) **Convention** of the Association.

Sec. 3.—The Council shall, through its officers and otherwise, give diligent attention to and foster the scientific work and spirit of the Association, and shall study and strive constantly to make each Annual (Session) **Convention** a stepping stone to future ones of higher interest.

Sec. 4.—The Council shall, in connection with the House of Delegates, consider and advise as to the interests of the profession and of the public in those important matters wherein it is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation and to diffuse popular information in relation thereto.

Sec. 5.—The Council shall make careful inquiry into the condition of the profession of each county in the state and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse among physicians of the same locality and shall continue these efforts until every physician in every county of the state who can be made reputable has been brought under medical society influence.

Sec. 6.—The Council shall encourage postgraduate and research work, as well as home study, and shall endeavor to have the results utilized and intelligently discussed in the county societies.

Sec. 7.—The Council shall, upon application, provide and issue charters to county societies organized to conform to the spirit of this Constitution and By-Laws.

Sec. 8.—In sparsely settled sections it shall have authority to organize the physicians of two or more counties into societies to be designated by hyphenating the names of two or more counties so as to distinguish them from district and other classes of societies; and these societies, when organized and chartered, shall be entitled to all the privileges and representation provided herein for county societies, until such counties may be organized separately.

Sec. 9.—The Council shall be the Board of Censors of the Association. It shall consider all questions involving the rights and standings of members whether in relation to other members, to the component societies, or to this Association. All questions of an ethical nature brought before the House of Delegates or the General or Section Meetings shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members of component societies on which an appeal is taken from the decision of an individual Councilor, and its decision in all such matters shall be final.

Sec. 10.—The Council shall provide for and superintend all publications of the Association, and shall have authority to appoint an editor and such assistants as it deems necessary, and fix the amounts of their salaries. The proceedings of the Council for the year shall be reported to the House of Delegates at the Annual (Session) **Convention** and be published in the number of THE JOURNAL which immediately precedes the Annual (Session) **Convention.**

Sec. 11.—In the interim between the (sessions) **meetings** of this Association the Council shall be the executive body of the Association with full power to fill vacancies or transact any business that emergencies or the welfare of the Association may require.

(Sec. 12.—The Council shall employ an Executive Secretary, who need not be a physician nor a member of the Association.)

(Sec. 13) Sec. 12—The Council shall elect two members of the Association, who, with the President, the President-elect, **the Treasurer,** and the Chairman of the Council, shall constitute and be known as the Executive Committee.

CHAPTER VIII.—STANDING COMMITTEES

Section 1.—The standing committees shall be as follows:

The Executive Committee.
A Committee on **Convention** Arrangements.
A Committee on Scientific Work.
A Committee on Scientific Exhibits.
A Committee on Public Policy and Legislation.
A Committee on Publicity.
(A Committee on Industrial and Civic Relationship.)
A Committee on Industrial Health.
A Committee on Medical Education and Hospitals.
(A Committee on Budget.)
A Committee on Public Relations.
A Committee on Constitution and By-Laws.

Such committees, except the Executive Committee, which is elected by the Council, (and the Committee

on Budget, the membership of which is hereinafter provided for,) shall be appointed by the President of the Association. (The President may also appoint such other committees as may be necessary. No member of the Indiana State Medical Association shall serve as a member of two major committees in any one year.)

All members of Committees shall serve for one year unless otherwise specified in these By-Laws or in the authorization for appointment.

Sec. 2.—*The Executive Committee,* consisting of (five) **six** members as heretofore provided for, shall meet (regularly once a month) **on the call of the chairman or of any three members** with the Executive Secretary to plan and execute such work as may be necessary for the welfare of the Association and the conduct of the Executive Secretary's office. It shall constitute the Medical Defense Committee of the Association and shall have full authority governing all matters pertaining to the medical defense features of this Association, and shall be governed by the rules and regulations concerning such features as provided for in the By-Laws of this Association. It shall represent the Council during intervals between meetings of that body, **including matters pertaining to the Journal of the Association,** and shall report its doings to the Council.

It shall prepare a budget for the ensuing calendar year; and all expenditures of the Association, except those otherwise provided for under the Constitution and By-Laws, shall be governed by the budget. No expense not provided for in the budget or otherwise under the Constitution and By-Laws shall be incurred by any officer or committee. A committee or an officer may submit a request for funds to meet unusual expenses not included in the annual budget, and the Executive Committee shall have the power, by a two-thirds vote, to amend the budget to provide such funds.

Sec. 3.—*The Committee on Convention Arrangements* **shall consist of five or more members.** With the advice and assistance of the Executive Secretary **this Committee** shall provide suitable accommodations for the meetings of the Association, including the House of Delegates, Council, and of their respective committees, the scientific and commercial exhibits, and in conjunction with the Executive Secretary shall have general charge of all the arrangements. Its Chairman shall report an outline of the arrangements to the Executive Secretary of the Association for publication in THE JOURNAL and in the official program, and shall make additional announcements during the session as occasion may require. The arrangements for and the character of any and all commercial exhibits must meet with the approval of the Executive Committee of the Association.

(Sec. 4.—*The Committee on Scientific Work* shall consist of three members, one to serve one year, one to serve two years, and one to serve three years, thereafter one to be appointed each year for a period of three years; the senior member to be Chairman.

(The President, the officers of the sections, and the Executive Secretary are to be *ex officio* members.)

(Liaison shall be maintained between the Committee on Scientific Work and the scientific exhibitors. Thirty days previous to each Annual Session it shall prepare and issue a program announcing the order in which papers, discussions, and other business shall be presented. Such program and all announcements concerning the Annual Session shall be published in the number of THE JOURNAL of the Association that is issued just prior to the Annual Session.)

Sec. 4.—*The Committee on Scientific Work* **shall consist of three or more appointive members appointed annually by the President; and of the Chairman of the Committee on Scientific Exhibits and of the Chairman of the sections as** *Ex-Officio* **members. It shall be the duty of the officers of the various sections to prepare and submit to this committee prior to the first meeting of the committee a suggested program of subjects and personnel for their respective sections in the Annual Convention. The scientific program and the financial requirements to provide for it must be approved by the Executive Committee before the program is officially announced.**

Sec. 5.—The Committee on Scientific Exhibits shall consist of five or more appointive members. It shall have the duty of arranging for Scientific Exhibits as a part of the Annual Conventions, subject to the approval of the Executive Committee.

(Sec. 5.—*The Committee on Public Policy and Legislation* shall consist of three members and the President and Executive Secretary of the Association. Under the direction of the House of Delegates it shall represent the Association in securing and enforcing legislation in the interest of public health, medical education, scientific medicine and the economic welfare of the medical profession. It shall keep in touch with professional and public opinion, shall endeavor to shape legislation so as to secure the best results for the whole people, and to protect the medical profession, and shall strive to organize professional influence so as to promote the general good of the community in local, state and national affairs and elections.)

Sec. 6.—*The Committee on Public Policy and Legislation* **shall consist of at least five or more appointive members. Under direction of the House of Delegates it shall represent the Association in securing and enforcing legislation in the interest of public health, medical education, scientific medicine, and the improvement of the medical profession. It shall keep in touch with professional and public opinion and shall endeavor to create and direct public opinion to the end that the public will demand adequate legislation for the promotion of the public good in relation to medicine and the enforcement of such legislation.**

(Sec. 6.) Sec. 7.—*The Committee on Publicity* shall consist of (five) **three appointive** members. (two of which shall be the President and the Executive Secretary of the Association.) It shall be responsible for the dissemination of information concerning individual and community health to the lay public through articles prepared for publication in lay publications, (or) **and** for addresses or talks delivered before lay audiences under the authority of the Association, and shall in every way seek to give the lay public a better knowledge and understanding of the aims and objects of scientific medicine.

(Sec. 7.—*The Committee on Industrial and Civic Relationship* shall consist of three members appointed by the President, each to serve for three years, one member to be appointed each year. The duties of the committee shall be: To study, gather facts and become intimately acquainted with all and every movement wherever and by whomsoever agitated, proposed, enacted or attempted to be enacted, that has as its secret or avowed object the providing of social, commercial or industrial medical insurance for the public, civic or commercial employers, or for the providing of medical or surgical care to a group or groups of individuals, singly or collectively, or which in any manner affects the economic and financial status of the members of this Association either individually or collectively; to represent this Association in efforts to secure greater co-operation and a mutual understanding between medical men and employers of labor or their insurance carriers concerning the rendering of professional services in industrial cases and the

amount and character of compensation therefor; to devise and advise, whenever necessary, intelligent action on the part of this Association upon these questions; and to report annually, and in writing, its findings, recommendations and information to the House of Delegates. Should occasion arise in the interval between the stated meetings of the House of Delegates when prompt action becomes imperative, the committee is to present its findings to the Chairman of the Council and President, who are to proceed in such emergencies as empowered by this Constitution and By-Laws.)

Sec. 8.—*The Committee on Industrial Health* **shall consist of five or more appointive members. The duties of the committee shall be: To study and gather facts and become intimately acquainted with the problems regarding industrial health, including any such problems as those relating to the prevention and cure of industrial injuries and diseases; to the method and means of providing adequate medical and hospital care for those suffering from industrial diseases and injuries; and to the maintenance of cooperation and mutual understanding among the members of the medical profession, employers of labor, employees and insurance carriers.**

(Sec. 8.) Sec. 9.—*The Committee on Medical Education and Hospitals* shall consist of (three) **five appointive** members. (appointed by the President, each to serve for three years, one member to be appointed each year.) The duties of this committee shall be to cooperate with the authorities of the Indiana University School of Medicine in efforts to improve the educational standards of the state as they pertain to the practice of medicine; to act in conjunction with the members of the Council in providing postgraduate clinics or teaching for the various Councilor medical districts of the state; **to cooperate with the Hospital Council of the Indiana State Board of Health in connection with the making and recommending of rules and regulations for the management of hospitals;** to select one of its own members as a delegate to the yearly Conference on Medical Education and Hospitals of the American Medical Association; and to cooperate with the corresponding Council of the American Medical Association.

(Sec. 9.—*The Committee on Budget* shall consist of the officers, the retiring President and the chairman of the Council. The duty of this committee shall be to prepare a budget for the ensuing year, and all expenditures of the Association, except those otherwise provided for by the Constitution and By-Laws, shall be governed by the budget. No expense not provided for in the budget shall be incurred by any officer or committee. A committee or an officer may submit a request for funds to meet unusual expenses, which request may be granted by two-thirds vote of the Budget Committee.)

(Sec. 10.—*The Committee on Public Relations* shall have as its duty to act as liaison between the Indiana State Medical Association, the Indiana University School of Medicine, the Indiana State Board of Health, and the public; to hear and investigate complaints; to gather facts, and so far as it may be in their province, to correct existing faults and incorrect information; to further co-operation; and to obtain proper and legitimate publicity through the Publicity Committee of all matters of public interest concerning the above.)

Sec. 10.—*The Committee on Public Relations* **shall consist of five or more appointive members. The duties of the committee shall be to continuously develop and carry on a program to improve and sustain good will among the members of the medical profession and the general public; to study and assemble information regarding the means by which the interests of the public relations of the medical profession may best be served; to obtain through public and professional contacts and report to the profession through proper means information regarding the sentiments, criticisms and suggestions for improvement which may be made either by members of the profession or by the lay public; and to have the special responsibility of furnishing leadership and guidance in keeping the medical profession as a whole within the deserved respect and esteem of the people.**

Sec. 11.—*The Committee on Constitution and By-Laws* **shall consist of five appointive members. The duties of this committee shall be: to keep in contact with the developments and changes in procedures in carrying on the work of this Association; to suggest revisions necessary to keep the Constitution and By-Laws always in accord with the practices and procedures best adapted to the functioning of the Association; and to keep the practices and procedures consistent with the provisions from time to time contained in the Constitution and By-Laws—to the end that all members of the profession, by reference to the Constitution and By-Laws, may be able to obtain accurate information regarding procedure and practices within the Association, and that hamperling of such procedure and practice by obsolete provisions in the Constitution and By-Laws may be avoided.**

Sec. 12.—The President and Executive Secretary shall be *ex officio* **members of all the foregoing standing committees where their inclusion on the committee is not otherwise provided for in these By-Laws.**

CHAPTER IX.—SPECIAL COMMITTEES

The President may appoint such other committees in addition to the Standing Committees as he deems necessary or as may be specially authorized by The House of Delegates, The Council, or The Executive Committee. Any such committees shall be known as Special Committees.

CHAPTER (IX) X.—REFERENCE COMMITTEES

(Section 1.—Immediately after the organization of the House of Delegates at each Annual Session, the President shall appoint from the members of the House, reference committees to serve during the session at which they are appointed. Selection of these reference committees shall be made by the President and his advisors at a time sufficiently in advance of the Annual Session, so that the roster of the committees may be published in THE JOURNAL and/or Hand Book prior to said Annual Session. Such publication shall constitute notification of appointment of the various delegates to their respective committees. Absenteeism shall be reported immediately to the President, who then will substitute from among those present.)

Sec. 1.—Immediately after the organization of the House of Delegates at each Annual Convention, the President shall announce the membership of The Reference Committees to serve during the Convention for which they are appointed. Appointments to these Reference Committees, the members of which serve during the Convention for which they are appointed, shall be made by the President in time for them to be published in THE JOURNAL and The Handbook prior to such Annual Convention.

The President shall have the power to appoint substitutes from among the members present for absent appointees.

Each committee shall consist of five members, the chairman to be specified by the President. To these

committees shall be referred all reports, resolutions, measures and propositions presented to the House of Delegates, except such matters as properly come before the Council, and the recommendations of these committees shall be submitted to the next meeting of the House of Delegates for acceptance in the original or modified form or for rejection.

Sec. 2.—The following reference committees are hereby constituted:

(1) A Committee on Sections and Section Work to which shall be referred all matters relating to the sections or section work. (The members of the Committee on Scientific Work shall be members *ex officio* of this committee.)

(2) A Committee on Rules and Order of Business to which shall be referred all matters regarding rules governing the action, methods of procedure, and order of business of the House of Delegates.

(3) A Committee on Medical Education and Hospitals to which shall be referred all matters relating to medical education and medical colleges and hospitals. (The members of the standing committee on Medical Education and Hospitals shall be *ex officio* members of this committee.)

(4) A Committee on Public Policy and Legislation to which shall be referred all matters relating to state and national legislation, and memorials to the legislature, to the United States Congress, to the Governor of the state, or to the President of the United States. (The members of the standing committee on Public Policy and Legislation shall be *ex officio* members of this committee.)

(5) A Committee on Publicity to which shall be referred all matters relating to publicity. (The members of the standing committee on Publicity shall be *ex officio* members of this committee.)

(6) A Committee on Hygiene and Public Health to which shall be referred all matters relating to hygiene and public health.

(7) A Committee on Amendments to the Constitution and By-Laws to which shall be referred all proposed amendments to the Constitution and By-Laws.

(8) A Committee on Reports of Officers to which shall be referred the address of the President and the reports of the Executive Secretary, Treasurer, and the Council.

(9) A Committee on Credentials to which shall be referred all questions regarding registration and the credentials of delegates.

(10) A Committee on Miscellaneous Business to which shall be referred all business not otherwise disposed of.

Sec. 3.—The time and place of meetings of all Reference Committees shall be publicly posted, and all meetings of all Reference Committees shall be open to all members of the Association.

Officers and chairmen of all committees whose reports are referred to Reference Committees shall have the right to appear and be heard before the respective committees to which such references are made, in regard to their reports.

CHAPTER (X) XI.—COUNTY SOCIETIES

Section 1.—All county societies now in affiliation with this Association or those which may hereafter be organized in this state, which have adopted principles of organization not in conflict with this Constitution and By-Laws, shall, on application, receive a charter from and become a component part of this Association. The acceptance or retention of this charter shall be regarded as a pledge on the part of said component society to conduct itself in harmony with the letter and (/or) spirit of this Constitution and By-Laws and other rules and resolutions of this Association.

Sec. 2.—Charters shall be issued only upon approval of the Council and shall be signed by the President and Executive Secretary of this Association. The Council shall have authority to revoke the charter of any component society whose actions are in conflict with the letter and (/or) spirit of this Constitution and By-Laws.

Sec. 3.—Only one component medical society shall be chartered in any county. Where more than one county society exists, friendly overtures and concessions shall be made, with the aid of the Councilor for the district if necessary, and all of the members brought into one organization. In case of failure to unite, an appeal may be made to the Council, which shall decide what action shall be taken.

Sec. 4.—Each county society shall be judge of the qualifications of its own members, but, as such societies are the only portals to this Association and to the American Medical Association, every reputable and legally registered physician who does not practice or claim to practice, nor lend his support to, any exclusive system of medicine, shall be entitled to membership. Before a charter is issued to any county society, full and ample notice and opportunity shall be given to every physician in the county to become a member.

Sec. 5.—Any physician who may feel aggrieved by the action of the society of his county in refusing him membership, or in suspending or expelling him, shall have the right to appeal to the Council, and its decision shall be final.

Sec. 6.—In hearing appeals the Council may admit oral or written evidence as in its judgment will best and most fairly present the facts, but in case of every appeal, both as a board and as individual Councilors in district and county work, efforts at conciliation and compromise shall precede all such hearings.

Sec. 7.—When a member in good standing in a component society moves to another county in this state his name, on request, shall be transferred without cost to the roster of the county society into whose jurisdiction he moves, provided the transfer is approved by majority vote of the membership of said society to which the membership is proposed.

Sec. 8.—A physician living on or near a county line may hold his membership in that county most convenient for him to attend, on permission of the society in whose jurisdiction he has his office or has the major part of his practice.

Sec. 9.—Each component society shall have general direction of the affairs of the profession in its county, and its influence shall be constantly exerted for bettering the scientific, moral and (material condition) professional status of every physician in the county; and systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified and honorable physician in the county.

Sec. 10.—At the annual business meeting for election of other officers, in advance of the Annual (Session) **Convention** of this Association, each county society shall elect delegates and alternates to represent it in the House of Delegates of this Association, and the secretary of the society shall send a list of such delegates and alternates to the Executive Secretary of this Association annually on or before (June) **August** first.

Sec. 11.—The secretary of each component society shall keep a roster of all its members and of the non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this state, and such other information as may

be deemed necessary. In keeping such roster the secretary shall note any changes in the personnel of the profession by death, or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

The secretary of each component society shall prepare and send to the councilor of his district a quarterly report briefly stating the activities of his county society including meetings, programs, changes in offices, and personnel of membership. A copy of this quarterly report to the councilor shall also be sent to the Executive Secretary of the State Association. The State Association shall supply each County Society Secretary a form for these reports.

Sec. 12.—The fiscal year of the Association shall be (from January 1, to December 31,) **the calendar year,** and all (assessments) **dues** shall be for the (fiscal) year and *payable in advance.* The secretary of each component society shall forward the (assessment) **dues** for his society, together with the roster of officers and members and list of non-affiliated physicians of the county, to the Executive Secretary of this Association, on or before January 1 of each year, and he shall promptly report thereafter the names of any new members elected to membership in his society, and promptly forward to the Executive Secretary of this Association the (assessment) **dues** for such new members. The (assessment) **dues** shall be the same for all members and entitle the members to all benefits, including the publications of this Association, from the time of paying the (assessment) **dues** to the close of the (fiscal) year only. **Provided, however, that beginning January 1, 1948, physicians elected to their first membership in this association during the first nine months of any year shall pay as dues for the remainder of that year the sum of $15.00; and those elected to membership after October 1st of any year shall pay $5.00 as dues for the remainder of that year.**

Sec. 13.—Any county society which fails to pay its (assessment) **dues** or make the report required by February 1 of each year shall be held suspended, and none of its members or delegates shall be permitted to receive any of the publications of the Association or participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met.

Sec. 14.—Each county society shall he held responsible for the faithfulness in the performance of duty on the part of its secretary in making reports and remitting dues (or assessments) to the Association.

Sec. 15.—Each component society shall have its own Constitution and By-Laws, not in conflict with the Constitution and By-Laws either of this Association or of the American Medical Association, a copy of which shall be filed with the Executive Secretary of this Association; and furthermore, the Executive Secretary shall be notified at once of any changes or amendments that may be made from time to time.

CHAPTER (XI) XII.—MISCELLANEOUS

Section 1.—The deliberations of this Association shall be governed by parliamentary usage as contained in Robert's Rules of Order, when not in conflict with this Constitution and By-Laws.

Sec. 2.—The Principles of Medical Ethics of the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

CHAPTER (XII) XIII.—MEDICAL DEFENSE

Section 1.—Seventy-five cents out of the annual dues of each member of the Association shall be set aside as a special fund for medical defense.

Sec. 2.—The administration of medical defense of this Association shall be intrusted to the Executive Committee, which shall constitute the Committee on Defense of the Association.

Sec. 3.—This committee shall have full authority governing all matters pertaining to the Medical Defense features of this Association; with power (to employ counsel, summon and) **to enter into agreement for the payment of fees of one attorney whom the physician sued shall have the right to choose, provided such attorney is of good reputation and standing at the bar, and to** employ expert witnesses and incur such other expenses as in the judgment of the committee may be necessary in the defense of members against whom suits may be brought; provided, always, that the total expenditure in any single suit shall not exceed 25 per cent of the fund available at the time suit is filed; and provided further that this Association shall not be liable for attorney's fees in such suits unless this committee shall have first agreed in each case with the physician sued and the attorneys representing him in regard to the terms of such employment, including the fees to be paid.

Sec. 4.—The Treasurer of the Indiana State Medical Association shall be custodian of the Defense Fund, separately kept, and shall give such additional bond as may be demanded by the Medical Defense Committee. (He shall pay out money from this fund only on the signed order of the chairman of the Executive Committee and countersigned by the President and the Chairman of the Council.) **Payments out of this fund shall be made only upon approval of the Executive Committee, by checks signed by the Treasurer and countersigned by the President and the Chairman of the Council.**

Sec. 5.—The Medical Defense Committee shall make an annual report to the House of Delegates of the cases in which it has been of service to members and furnish an account of the money received and expended, such report to be published in THE JOURNAL of the Indiana State Medical Association at the time and in the manner that reports of other committees of the Association are published. (The financial report of the committee shall be submitted to and approved by the Council.)

Sec. 6.—This Association shall not he liable for any damage awarded, but shall be liable only for such expenses for the legal defense of its members as may be incurred in accordance with the terms of these By-Laws.

Sec. 7.—The Association shall not undertake the defense of a member (in a suit that may be brought to secure indemnity for services rendered prior to January 1, 1912, nor) in any case in which the member who applies for medical defense by the Association has falied to pay his annual dues for the year in which services were rendered which are the basis of the suit; and medical defense by the Association shall not be available in any suit based on services rendered during any period of delinquency in the payment of dues. Dues are payable on January 1, and become delinquent on February 1 of each year. The membership card of this Association, duly signed and dated by the Executive Secretary, shall be considered the only *bona fide* evidence of payment of dues or membership in this Association.

The Indiana State Medical Association shall in no case provide medical defense against any action for alleged malpractice against any physician unless such physician was a member of this Association in

good standing at the time the services which are the basis of the suit were rendered.

Sec. 8.—A member desiring to avail himself of the services of the Committee on Medical Defense in connection with litigation brought or threatened must send to the Executive Secretary of the Association for an application blank. After completing the data concerning the case he shall submit to a local committee of his county medical society—to be composed of the President, Secretary and one other member in good standing who may be nominated by the defendant—a full statement of the question at issue, including the diagnosis and treatment of the case and the names of physicians, nurses and other persons having knowledge of the same, who may be summoned as witnesses.

Sec. 9.—The committee of the county medical society shall immediately, after an investigation of all the circumstances and facts, transmit its report, with recommendations, to the Committee on Medical Defense of this Association.

(Sec. 10.—Accompanying such report from the county society, if favoring medical defense by the Association, there also must be furnished the written authority of the defendant granting to the Medical Defense Committee of this Association full power to act in his behalf, and an agreement that his case shall not be compromised or settled without the consent of a majority of the Committee on Medical Defense.)

Sec. (11) 10.—In the event that the county committee shall fail to recommend the case as one worthy of the recognition of this Association, a direct appeal may be made to the Committee on Medical Defense of this Association, whose decision shall be final.

Sec. (12) 11.—Suits brought against the estate of a deceased member shall be defended as if that member were alive; provided that such member was in good standing in the Association at the time of his death and that services for which indemnity is asked were rendered while the deceased was a member in good standing.

(Sec. 13.—Each member of the Committee on Medical Defense of this Association shall be entitled to an honorarium of $10 per diem for services actually rendered while at home, and $30 per diem with traveling expenses, if required to go out of town in the investigation of any case or in attendance at court, and these same fees shall be allowed to expert witnesses under similar circumstances.)

Sec. (14) 12.—Medical defense shall not be available to members living outside of the State of Indiana at the time services were rendered for which indemnity is claimed.

Sec. (15) 13.—The Committee on Medical Defense shall have power to adopt such other rules, not in conflict with the foregoing, as in their judgment may seem necessary.

Sec. (16) 14.—Medical defense as provided for by this Association shall be available to members under the terms stated in these By-Laws only in the defense of civil action for alleged malpractice, and shall not be available if such alleged malpractice occurred when the member was under the influence of any intoxicant or narcotic while rendering the service in question.

CHAPTER (XIII) XIV.—DIVISION OF FEES

This Association does not countenance or tolerate fee-splitting, division of fees, or commission paying directly or indirectly, and any member found guilty shall be expelled from membership.

CHAPTER (XIV) XV.—AMENDMENTS

Section 1.—These By-Laws may be amended at any Annual (Session) **Convention** by a majority vote of all the delegates present at that (session) **Convention,** after the amendment has lain on the table for one day.

Sec. 2.—Upon the adoption of this Constitution and By-Laws all previous Constitutions and By-Laws are hereby repealed.

I. C. BARCLAY, M. D., *Chairman,*
HAROLD M. TRUSLER, M. D.,
WENDELL A. SHULLENBERGER, M. D.,
GORDON A. THOMAS, M. D.,
A. W. CAVINS, M. D.,
CLAUDE D. HOLMES, M. D.,
CHARLES F. OVERPECK, M. D.

COMMITTEE ON CRIPPLED CHILDREN SERVICES

House of Delegates,
Indiana State Medical Association.

Gentlemen:

The committee held a meeting in Indianapolis on March 7, 1948. Those present included the chairman, Dr. Wayne Glock, Fort Wayne; Dr. George Garceau, Indianapolis; Dr. Carl D. Martz, Indianapolis; Dr. Robert B. Acker, South Bend; Dr. Joseph C. Lawrence, Evansville; and Dr. F. M. Whisler, Wabash. Dr. Huckleberry of Salem and Dr. Topping of Terre Haute were absent.

Guests at the meeting were Dr. Cleon A. Nafe, president of the Indiana State Medical Association; Mr. Ray E. Smith, executive secretary of the Indiana State Medical Association; and Mr. Carl F. King, administrator of the Division of Services for Crippled Children, State Department of Public Welfare.

The chairman described the duties of the committee as follows:

1. Close liaison with the Crippled Children's Services of the Department of Public Welfare.

2. An advisory relationship to the Division of Special Education of the Department of Public Instruction.

3. Liaison with the Governor's Commission for Handicapped Children.

4. An advisory relationship to voluntary agencies such as the Indiana Society for Crippled Children.

A short discussion of the current program was given by Dr. Martz. This described the historical background of services, the present facilities and personnel available, recent legislation and the operating policy of the division, and a very brief statistical summary of recent services.

A report on the survey of handicapped children in Indiana which is now in progress was given by Mr. King. The committee discussed this survey and the following resolutions were adopted by the committee:

1. *Resolved,* That the name of the crippled child may be released to a responsible agency approved by the Governor's Commission for Physically Handicapped Children. Information

necessary to the agency (private or public) responsible for his care, may also be released.
(Motion made and seconded by Drs. Garceau and Whisler.)

2. *Resolved*, That full statistical information shall be made freely available but due care should be exercised to see that it is presented in such a manner that the proper interpretations will be made.
(Motion made and seconded by Drs. Acker and Lawrence.)

It was the feeling of the committee that the activities of the Governor's commission should be encouraged and that whenever it seemed desirable, the state medical association's committee would be happy to attend a joint meeting with them.

The policy of care under welfare service was then discussed. The present definition of a crippled child as used by the State Department of Public Welfare was deemed satisfactory. The following resolutions were adopted:

1. *Resolved*, That welfare cases closed on account of financial ineligibility be referred back to the family physician for continued care.
(Motion made and seconded by Drs. Lawrence and Martz.)

2. *Resolved*, That nonindigent service cases at the Indiana University Medical Center hospitals be discontinued.
(Motion made and seconded by Drs. Garceau and Acker.)

The medical care of cerebral palsied children and activities in the field of special education were discussed. It was the feeling of the committee that activities in these areas should be under careful surveillance, that high professional standards be maintained and that every effort be made to coordinate the medical care and treatment program of all professional and technical services. It was requested that the president of the state medical association prepare an article for publication in the forthcoming June magazine of the welfare department, presenting the interest and the suggestions of the medical profession on behalf of the medical care and education of physically handicapped children.

The administration of the crippled children's division was discussed by the committee in relation to various proposals of the children's bureau particularly regarding full-time medical supervision. The following resolution was adopted by the committee:

1. *Resolved*, That efficient lay administration with careful medical supervision and consultation by practicing physicians shall be the procedure employed in Indiana's administration of crippled children's services.
(Motion made and seconded by Drs. Garceau and Lawrence.)

The committee commended the present policies and administration of state crippled children's service and expressed a desire to be consulted from time to time on problems concerning the entire field of crippled children's service.

Wayne Glock, M.D., *Chairman*,
George Garceau, M.D.,
Carl D. Martz, M.D.,
Irvin E. Huckleberry, M.D.,
F. M. Whisler, M.D.,
Robert B. Acker, M.D.,
M. C. Topping, M.D.,
Joseph C. Lawrence, M.D.

COMMITTEE ON HARD OF HEARING

House of Delegates,
Indiana State Medical Association.

Gentlemen:

Your Committee on Hard of Hearing met at the Indianapolis Athletic Club on May 5, 1948.

Those present were: Dr. E. E. Holland, Richmond; Dr. Dillon Geiger, Bloomington; and Dr. R. M. Dearmin, Indianapolis.

The following recommendations were made:

1. That the medical profession cooperate in the care of the hard of hearing child as provided by Chapter 212 of the Indiana Acts of 1941.

2. That no treatment be recommended and that no child be placed in a lip reading class except on the recommendation of a recognized otologist.

3. That the medical profession cooperate and aid in the training of the hard of hearing as advocated by the League of Hard of Hearing.

4. That the establishment of hearing aid clinics under medical supervision is to be encouraged in the larger cities of the state.

Robert M. Dearmin, M.D., *Chairman.*
Kenneth L. Shaffer, M.D.,
E. E. Holland, M.D.,
Dillon Geiger, M.D.,
Guy A. Owsley, M.D.

COMMITTEE ON HEART DISEASE

House of Delegates,
Indiana State Medical Association.

Gentlemen:

The committee on heart disease desires to report the activities of this committee during the past year.

The Indiana State Heart Foundation has been organized and a trustee appointed by Dr. Nafe to represent our association. This organization is affiliated with the American Heart Association. They have the following aims:

1. To educate the doctor in heart disease by the establishment of fellowship grants, scientific meetings, and published brochures.
2. To aid in the establishment of needed cardiac clinics throughout the state.
3. Liaison between the state association and the American Heart Association.
4. To aid the cardiac patient in as many ways as possible.

This project, the committee feels, is a most worthy one and deserves the support of the entire medical profession of the state, as it is primarily for their benefit.

Robert M. Moore, M.D., *Chairman,*
Don E. Wood, M.D., *Vice-chairman,*
Stanton L. Bryan, M.D.,
Stuart R. Combs, M.D.,
S. W. Ellis, M.D.,
E. M. Pitkin, M.D.,
Robert B. Sanderson, M. D.,
A. N. Ferguson, M.D.,
Ralph A. Elliott, M.D.,
C. L. Rudesill, M.D.

COMMITTEE ON INDIANA INTER-PROFESSIONAL HEALTH COUNCIL

House of Delegates,
Indiana State Medical Association.

Gentlemen:

The Indiana Inter-Professional Health Council met April 20, 1948, with each of the associated groups well represented. The meeting was in charge of Chairman Jenkins. Guests from the Indiana State Board of Health and Veterinary Association and the state medical association were present.

Doctor Jenkins reviewed the activities of the council and its executive committee and called attention to matters that are likely to come before Congress and in state legislation affecting the various health groups, professional and public health in general.

Doctor Burney expressed his appreciation of the support the Council had given the state board of health. He solicited assistance in the board's present program in the development and improvement of local health departments. He pointed out the need for the codification of all health laws in Indiana. Study of this has been approved by the Governor, who has appointed an advisory committee in the various health groups to assist in this project.

Mr. Rogers, from the office of the state board of health, reviewed the progress made in its hospital inspection, licensing and construction programs. The chairman then called on representatives from each member association to present matters confronting their particular profession. Doctor Nafe, Doctor Rice and Mr. Ray E. Smith spoke for the medical groups. Doctor Nafe suggested that all groups represented on the council give further consideration toward the establishment of local inter-professional health councils, fashioned after the state council.

It was moved and carried that each member group take this matter up with their respective state association officers for approval.

It was decided that the next meeting of the Council would be on or about November 20.

E. H. Clauser, M.D., *Chairman,*
A. P. Hauss, M.D.,
Cleon A. Nafe, M.D.,
Alfred Ellison, M.D.,
Norman M. Beatty, M.D.

COMMITTEE ON INDIGENT MEDICAL CARE

House of Delegates,
Indiana State Medical Association.

Gentlemen:

No business has been referred to the Committee on Indigent Medical Care during the past year. The committee therefore has no report to make.

Claude S. Black, M.D., *Chairman,*
Donald J. Caseley, M.D.,
Robert W. Gehres, M.D.,
S. M. Cotton, M.D.,
O. G. Hamilton, M.D.,
Paul B. Casebeer, M.D.,
William A. Karsell, M.D.

COMMITTEE ON INDUSTRIAL HEALTH

House of Delegates,
Indiana State Medical Association.

Gentlemen:

A meeting of your Committee on Industrial Health was held at Indianapolis on March 7, 1948, at which time various phases of industrial health problems were discussed at great length.

The question of medicolegal testimony before the Industrial Board was discussed and the problem was referred back to the state Council, which has appointed a subcommittee to work on this subject. However, it was the opinion of your committee that the code of ethics which was adopted by the state medical association two years ago covers this subject quite well.

Emphasis was again placed on county and district medical meetings, recommending at least one or more meetings devoted to industrial medicine. There are two excellent types of meetings on industrial medicine, namely:

1. The medical society visits an industrial plant and sees the problems with which the industrial physician is confronted, as well as the type of work which the laborer does, followed by a dinner meeting at which some prominent authority discusses an industrial problem.
2. The speaker, or clinic-type meeting, inviting the industrialists as the guests of the society.

There have been several of these held over the state the past year, one sponsored by General Motors at Indianapolis, another by General Motors at Anderson, two in Lake County sponsored by the Tenth District Medical Society, and others.

A postgraduate meeting was discussed by your committee. It was decided this year to recommend to the program committee of the state association that an outstanding industrial physician and surgeon be asked to talk on a subject of common interest to the general practitioner as well as to the industrial physician. It is hoped by so doing to reach as many doctors in the state of Indiana as possible and to help them understand the problems of industrial medicine. This recommendation was made, and Dr. Earl D. McBride of Oklahoma City has consented to talk on "Disability Evaluation." It is certainly a most appropriate subject and of extreme importance to all doctors in their practice of medicine.

One of the most serious problems confronted by the working man and industry in the state of Indiana, from an employment standpoint, is the lack of a waiver law. Your committee thinks that if the state association were able by its good efforts to encourage the legislature to pass a competent waiver law that it would be the most humane bill that has been passed by the legislature in years. The question of the second injury law was discussed also and it was recommended that the legislature should take action along this line.

Several plans as suggested by other states were reviewed and we are rather proud of the fact that practically all of these are adoptions of the plans which have been worked out by your Indiana committee.

One of the results of the work of your committee is a full course in industrial medicine established at Indiana University School of Medicine for junior medical students. This is a compulsory course and we think one of the finest things for Indiana industrial medicine.

I want to take this opportunity to thank every member of the committee for their fine cooperation and Doctor Nafe for appointing such an excellent committee.

E. S. Jones, M.D., *Chairman*,
John Hilbert, M.D.,
L. W. Spolyar, M.D.,
E. T. Stahl, M.D.,
M. R. Davis, M.D.,
E. H. Carleton, M.D.,
Emmett B. Lamb, M.D.,
Harry W. Garton, M.D.,
J. C. Donchess, M.D.,
Allan K. Harcourt, M.D.,
Bruce W. Stocking, M.D.

COMMITTEE ON INFANTILE PARALYSIS

House of Delegates,
Indiana State Medical Association.

Gentlemen:

No problems having arisen to occasion a need for a meeting of this committee during the past year, no meetings were held and we have no activities to report.

R. R. Hippensteel, M.D., *Chairman*,
Kenneth T. Knode, M.D.,
Neal E. Baxter, M.D.,
W. Donald Davidson, M.D.,
James E. Jobes, M.D.,
Stewart H. Crossland, M.D.,
R. A. Craig, M.D.

COMMITTEE ON INSTRUCTIONAL COURSES

House of Delegates,
Indiana State Medical Association.

Gentlemen:

The Committee has held the necessary meetings to arrange for the offering of thirty one-hour courses for the convention date, October 26, 1948.

Due notice of this convention activity has been given on full pages of The Journal and the enrollment blanks and curriculum schedule are published in this issue of The Journal.

Russell A. Sage, M.D.,
Gordon W. Batman, M.D.,
Co-chairmen,
Herbert L. Egbert, M.D.,
J. Lawrence Sims, M.D.,
A. G. Funkhouser, M.D.,
Floyd T. Romberger, Jr., M.D.,
E. Paul Tischer, M.D.

COMMITTEE ON MATERNAL AND CHILD HEALTH

House of Delegates,
Indiana State Medical Association.

Gentlemen:

At a joint meeting of this committee with the Committee on Conservation of Vision, a recommendation was made to the state board of health that the Crede method of prophylaxis against ophthalmia neonatorum in the newborn be continued as it has in the past until more proven acceptable methods are developed.

Our committee authorized Doctor Jewett to submit the Criteria for Classification of Births previously recommended by the Committee on Maternal and Child Health, and approved by the House of Delegates of the state association, to all county medical societies and all hospitals in the state, with the recommendation that these criteria be adopted universally throughout the state and recommended for adoption by other states.

The pediatricians on the committee expressed as their opinion that the need for a premature center in the state of Indiana was of paramount importance since the greatest need is for nursing personnel to care for prematures, and such personnel cannot be obtained until we establish facilities for training. The committee took no action, but it was

the general expression that the promotion of a premature care demonstration center for teaching nursing personnel should be retained as one of the major responsibilities of the Committee on Maternal and Child Health.

G. W. GUSTAFSON, M.D., *Chairman,*
FOSTER J. HUDSON, M.D.,
E. R. CARLO, M.D.,
REX W. DIXON, M.D.,
H. D. PYLE, M.D.,
WILLIAM L. WISSMAN, M.D.,
FRANK W. PEYTON, M.D.,
OLGA B. BOOHER, M.D.,
ROBERT E. JEWETT, M.D.,
H. W. EGGERS, M.D.,
MAHLON F. MILLER, M.D.

COMMITTEE ON MEDICAL AND NURSING SCHOOL SCHOLARSHIPS

House of Delegates,
Indiana State Medical Association.

Gentlemen:

Before going into detail about the activities of the Committee on Medical and Nursing School Scholarships it might be well to review the two Council actions which made it necessary for this committee to be created.

To encourage more young men to go into general practice, and particularly in the rural communities, the Council, in January, 1947, appropriated $3,000 a year for six scholarships for medical school students who would agree to spend five years following their internships in rural practice. The scholarships, paying $500 a year to each of the recipients, are for Indiana citizens only.

In July, 1947, the Council expanded its scholarship program to include nursing school students. The sum of $1,200 was set aside annually for six scholarships of $200 a year each. These are awarded to residents of Indiana, and the purpose is to help worthy girls without the necessary finances to get nursing educations. The Council hoped to make a definite contribution toward educating more girls for the nursing profession, the nursing shortage being what it is.

The committee administers the scholarship funds of the association which are in the nature of a trust, known as the Indiana State Medical Association Scholarship Fund. The trust may receive money from private sources for creation of scholarships in addition to those provided by the association.

The committee made its first scholarship awards in August, 1947. It has met frequently since that time to make additional awards. In addition to the six nursing scholarships financed by the association, Mr. and Mrs. H. C. Krannert of New Augusta, are paying for four annually, and Mr. Joseph E. Meyer of Hammond, is providing funds for another. The committee has good reason to believe that $200 a year will be made available to it for a medical school scholarship, and that others will supply money to help additional deserving nursing school students.

All of the medical school students holding scholarships completed their year's work successfully, but three young women who received nursing school scholarships failed, or discontinued training for one reason or another. This the committee regrets. Payment of the nursing scholarships is made on a quarterly basis and the progress of the recipients is checked at mid-semester in order that those not making satisfactory grades may be dropped from the scholarship list.

The six recipients of medical school scholarships, all of whom are enrolled in Indiana University School of Medicine, their home addresses and class standing as of September, 1948, are:

Charles E. Sheets, Anderson, freshman.
Herbert C. Ashmore, Lafayette, sophomore.
Earl R. Leinbach, Goshen, sophomore.
Fred W. Dierdorf, Terre Haute, junior.
Carl H. Ault, Indianapolis, junior.
William J. Pierce, Indianapolis, senior.

Student nurses receiving scholarships, the sponsors of their scholarships, their home addresses, the hospitals in which they are training, and their class standing as of September, 1948, are:

Sponsored by Indiana State Medical Association:

Dolores Marie Wedge, Bristol (St. Joseph, Mishawaka), junior.
Betty Lou Davis, Fort Wayne (St. Joseph, Fort Wayne), junior.
Alice Frances Hanselman, Evansville (St. Mary's, Evansville), junior.
Carolyn Janeice Goodknight, Kempton (St. Joseph, Kokomo), junior.
Mary Virginia Moore, Terre Haute (St. Anthony, Terre Haute), freshman.
Jeanette Anne Stanek, Hammond (St. Margaret, Hammond), freshman.

Sponsored by Mr. and Mrs. H. C. Krannert, New Augusta:

Barbara Anne Ketterman, Madison (Methodist, Indianapolis), junior.
Glenna Jean Martin, Indianapolis (General, Indianapolis), junior.
Betty Jeanne Hayes, Indianapolis (St. Vincent's, Indianapolis), freshman.
Joy Jackson, Indianapolis (General, Indianapolis), freshman.

Sponsored by Mr. Joseph E. Meyer, Hammond:

Patricia Joan Meyer, Indianapolis (Indiana University Medical Center, Indianapolis), freshman.

C. J. CLARK, M.D., Chairman,
ROBERT W. GEHRES, M.D.,
HERMAN T. COMBS, M.D.,
DAN URSCHEL, M.D.
Ex-officio:
CLEON A. NAFE, M.D.,
ALFRED ELLISON, M.D.,
NORMAN M. BEATTY, M.D.,
J. WILLIAM WRIGHT, M.D.

COMMITTEE ON MENTAL HEALTH

House of Delegates,
Indiana State Medical Association.

Gentlemen:

There has been no official meeting of the Committee on Mental Health, although some matters have received attention by correspondence. A meeting is planned in conjunction with the state association program in October.

A. M. DeArmond, M.D., *Chairman,*
L. P. Harshman, M.D.,
G. E. Metcalfe, M.D.,
W. L. Sharp, M.D.,
H. C. Buhrmester, M.D.,
E. V. Hahn, M.D.

COMMITTEE ON NECROLOGY

House of Delegates,
Indiana State Medical Association.

Gentlemen:

The report on necrology is published annually in the earliest possible number of The Journal.

James B. Maple, M.D., *Chairman,*
M. A. Austin, M.D.,
E. R. Clarke, M.D.,
O. E. Wilson, M.D.,
Charles F. Leich, M.D.,
George V. Cring, M.D.

COMMITTEE ON RURAL MEDICAL CARE

House of Delegates,
Indiana State Medical Association.

Gentlemen:

Your committee, meeting February 15, 1948, deliberated upon the problem of rural medical care, and reached some definite conclusions. It was agreed, among other things, that some changes should be made in the teaching of health to boys and girls in order to give them a better knowledge of the prevention and treatment of diseases that directly affect the future growth and welfare of their bodies.

The thinking of the committee was incorporated in the following resolution adopted at the meeting:

"Since it has become increasingly evident that certain national lay organizations, notably in the fields of poliomyelitis, heart disease, cancer, and tuberculosis, are constantly increasing in size, power, and scope, and since the medical profession is being subjected to some criticism due to its lack of active cooperation with these groups' programs, and whereas the doctors feel that they have not been taken into the confidence of these organizations so that they may take a more active part in the formulating of policies of these organizations, assisting in promotion of their programs, and discouraging the institution of ill-advised projects and campaigns,

"THEREFORE BE IT RESOLVED That the American Medical Association be directed to request the national headquarters of these organizations to revise or renew their policies, as the case may be, to the extent that local and county chapters of these organizations will advise the county medical societies in their locality of planned projects and programs and that this be done sufficiently ahead of the time of institution of said plan, policy, or program, that the medical society may approve or disapprove the plan, thus discouraging ill-advised plans at their inception, or furthering and assisting in the promotion of plans which they feel are to the benefit of their community."

The third annual Conference on Rural Health, held in Chicago in February under the auspices of the Committee on Rural Medical Services of the American Medical Association, was of great assistance to members of the committee who attended. The salient points brought out by the speakers:

1. The country is nearer socialized medicine than is generally realized. The need is not one of more doctors as much as better distribution of those now in practice.

2. The younger doctors should awaken to their responsibilities and give attention to the pleadings of the general public for adequate medical care, and not limit themselves to a certain territory.

3. To the average family in distress from sickness or accident the limitation of the areas in which one certain doctor works is all wrong, and it would seem that the family is right, so let all of us get busy and make our efforts count in placing our services at the call of all who need medical care. Such action will eliminate the cry for better rural medical care as much as anything.

It is regrettable that circumstances beyond its control prevented the committee from making a concentrated attack upon the rural health problem. It is observed that as more physicians complete their education we are gradually getting more doctors to enter practice in the smaller communities. The movement to give greater recognition to the general practitioner is encouraging.

J. E. Ferrell, M.D., *Chairman,*
H. N. Smith, M.D.,
R. W. Van Bokkelen, M.D.,
M. S. Brown, M.D.,
George L. Regan, M.D.,
B. F. Pence, M.D.,
James W. Asher, M.D.

COMMITTEE ON SCHOOL HEALTH AND PHYSICAL EDUCATION

House of Delegates,
Indiana State Medical Association.

Gentlemen:

The Committee met in March, 1948, to discuss ways and means of promoting better school health programs and to enlist a more active support on the part of the medical profession in its fulfillment. Fred V. Hein, Ph.D., Consultant in Health and Fitness of the American Medical Association, Hon. Ben H. Watt, State Superintendent of Public Instruction, and Mr. Robert Yoho, Director of Health Education, Indiana State Board of Health, were invited to attend the meeting. A state conference was decided upon and September 29, 1948, was selected as the date.

The following purposes of the conference were agreed upon:

1. To provide opportunity for interchange of information regarding the patterns of school health programs.
2. To define the role of the physicians in relation to health aspects of school physical education and athletics.
3. To learn how to establish better school health programs through discussions of mutual problems and exchange of ideas.

Four subjects were selected by the committee to be used as discussion topics, namely:

1. School health services.
2. Organization and administration of the school health program.
3. Physical education program and the physician.
4. The physician in the health and physical education program in rural areas.

Each topic was discussed by the groups in progressive fashion and each group was presided over by a moderator and four consultants, consisting of a physician, a school administrator, a nurse, and a teacher, with a reporter to record all suggestions. The results of the discussion of all groups will be presented to the general assembly by a summarizer at the close of the conference. It is hoped the conference will aid in stimulating the more active participation of the physicians in school health problems.

Walter L. Portteus, M.D., *Chairman,*
Francis P. Jones, M.D.,
G. O. Larson, M.D.,
J. H. Clevenger, M.D.,
George W. Willison, M.D.,
B. N. Lingeman, M.D.,
Byron K. Rust, M.D.,
Joseph E. Tether, Jr., M.D.,
Edith B. Schuman, M.D.,
William D. C. Day, M.D.

COMMITTEE ON SECRETARIES' CONFERENCE

House of Delegates,
Indiana State Medical Association.

Gentlemen:

The Annual Secretaries' Conference was held in Indianapolis at the Claypool Hotel on February 15, 1948. There were about 200 present.

The Honorable Forest A. Harness gave a talk on the propaganda activities of federal payrollers supporting national health insurance. Dr. E. L. Henderson, chairman of the Board of Trustees of the American Medical Association, talked about "The World Medical Association." Dr. Richard L. Meiling, Columbus, O., gave a talk on "The Program of the Council on National Emergency Medical Service."

Dr. Cleon A. Nafe, president, Indiana State Medical Association; Dr. A. P. Hauss, president-elect, Indiana State Medical Association; Dr. H. G. Hamer, Dr. Norman Beatty, Dr. Charles F. Thompson, Dr. K. L. Olson, Dr. Herman T. Combs, Dr. O. E. Wilson, and Mr. Ray E. Smith gave very interesting talks.

Dr. A. M. Mitchell was elected chairman for the 1949 meeting.

Albert M. Mitchell, M.D., *Chairman,*
Abraham M. Owen, M.D.,
Glen W. Lee, M.D.,
Kenneth Olson, M.D.,
Griffith Marr, M.D.

COMMITTEE ON STATE FAIR

House of Delegates,
Indiana State Medical Association.

Gentlemen:

The 1948 exhibit of the Committee on State Fair was located in the West Building of the Indiana State Board of Health at the Indiana State Fairgrounds. The keynote of this year's exhibit was the general theme of "See Your Family Physician." The background of the exhibit was formed by the AMA display of mechanical devices that answered questions showing the pitfalls of "self-diagnosis" and "self-medication." The highlight of the exhibit was the taking of blood pressures for the general public. Those individuals showing abnormalities of blood pressure were given a suitable note advising them to consult their family physician. Long lines of people formed well outside the entrance of the building to await their turns for blood pressures. More than 14,000 individual blood pressures were recorded.

As an added feature, the members of the Woman's Auxiliary of the Indianapolis Medical Society, under the able leadership of Mrs. Jerome Holman, Jr., served as hostesses for our exhibit and distributed the very popular "Mother Goose Health Rhymes" to the thousands of visitors. These little booklets received such acclaim that already the committee has received requests for more than 350 of the booklets from laymen throughout the state.

The committee again wishes to record its gratitude to Mr. Ray E. Smith, executive secretary of the Indiana State Medical Association, and Mr. Bird Baldwin, chairman of exhibits of the Indiana State Board of Health, for their excellent help

and advice in making this year's effort one of our most successful ones.

ROBERT H. WISEHEART, M.D., *Chairman,*
MALCOLM O. SCAMAHORN, M.D., *Vice-Chairman,*
ROY V. PEARCE, M.D.,
MARS B. FERRELL, M.D.,
HOWARD W. BEAVER, M.D.,
SAM W. CAMPBELL, M.D.,
RICHARD C. PRYOR, M.D.,
J. R. EASTMAN, JR., M.D.

COMMITTEE ON TRAFFIC SAFETY

House of Delegates,
Indiana State Medical Association.

Gentlemen:

Your committee has worked with the Indiana Traffic Safety Commission and the Indiana Traffic Safety Council, thereby exhibiting the willingness and desire of the medical profession to help in solving the tremendous problems of traffic safety and control.

Before the commission adopted its safety legislation recommendations for the 1949 Indiana General Assembly, the Committee on Traffic Safety went on record as favoring the establishment of a sixty-mile-per-hour speed limit. This action by the committee elicited the thanks and appreciation of Governor Gates; Mr. James D. Harrison, director of the commission; and Mr. E. C. Atkins, chairman of the council.

It is the considered opinion of the committee that the Indiana State Medical Association should approve of the five-point legislative program of the commission and council, as follows:

1. Sixty mile speed limit.
2. Increase of Indiana State Police highway patrol personnel to five hundred.
3. Bring Indiana laws into conformity with the Uniform Traffic Code.
4. Intensify all safety efforts by enforcement, engineering and education.
5. Provide the state fire marshal's office additional authority to protect race spectators.

The committee offered its assistance to the director of the Indiana Bureau of Motor Vehicles in making decisions relative to issuance of licenses to drivers involved in repeated accidents where there is a question of physical defects as a possible cause of accident.

M. N. HADLEY, M.D., *Chairman,*
F. B. MOUNTAIN, M.D.,
G. T. BOWERS, M.D.,
C. R. HERD, M.D.,
H. B. LINDSAY, M.D.

COMMITTEE ON TUBERCULOSIS

House of Delegates,
Indiana State Medical Association.

Gentlemen:

The Committee on Tuberculosis of the Indiana State Medical Association held a luncheon meeting at the French Lick Springs Hotel during the 1947 annual session of the association. The meeting was attended by about eighty doctors, including a number of tuberculosis committee members of the different counties. Dr. Merle Bundy, director of the Division of Tuberculosis Control of the State Board of Health, gave an interesting talk on "The Tuberculosis Program in Indiana," an outline of which follows:

Not unmindful of the tremendous amount of effective tuberculosis control work that has been carried on in Indiana, the State Board of Health established, through the financial assistance of the State Tuberculosis Association, the division of tuberculosis control in 1943.

Definite policies of the division were laid down by the executive board at their regular meeting. The need for this division had been shown through the control work that had been carried on in the state in the middle 30's and early 40's.

A quick perusal of our mortality and morbidity statistics indicates on careful analysis that there is a problem existing for the control of tuberculosis. It would seem, likewise, that this problem exists primarily in the adults. The major emphasis of the work in the division is being placed on case-finding and follow-up. Since we have a new method of finding cases early by the use of the miniature x-ray screening process, it would seem that certain groups logically lend themselves to survey work. Among these are industrial groups, local civic groups and schools. The policy as laid down for the division to follow indicated that every effort is made to obtain the cooperation of the local health officers, the local medical society and the local lay organizations interested in the fight against tuberculosis. No surveying is planned or instituted until this cooperation is manifest.

It would seem advisable that follow-up activities be intensified in order to take advantage of being able to find the cases early. Case registers are being set up as an administrative tool only, to facilitate the follow-up.

An appeal is made on the part of the state board of health for the committee on tuberculosis and the local medical societies, through their respective committee, to renew the interest of the private practitioner and to assume a greater function in the fight against tuberculosis. It is with great humility and respect that we of the state board of health continuously aspire to functioning synergistically with you, maintaining a united front in our mutual endeavor to reduce morbidity and mortality caused by tuberculosis.

Murray A. Auerbach, executive secretary of the Indiana Tuberculosis Association, gave a paper on "Group X-Ray Survey Findings in Indiana." A resumé of his talk follows:

An effective means of case-finding is through use of the miniature x-ray film. Approximately 100,000 persons were x-rayed in the state from January 1, 1946, to December 31, 1946, in group x-ray surveys. Reports were received from 25 counties covering 72,652 satisfactory films. These surveys were made

in all types of industries, in schools, and among the general population. The students were high school juniors and seniors but the figures do include 5,504 x-rays for the students in four colleges and universities. There were 2,278 cases of significant chest pathology. This is 3.14 per cent of those x-rayed.

Reinfection tuberculosis was found in 1,007, or 1.39 per cent, of those on whom satisfactory films were obtained. Of these, 79, or .11 per cent, were active and 63, or .09 per cent, were questionably active, making a total of 142, or .2 per cent, active and questionably active. Diagnosed as inactive were 865, or 1.19 per cent.

Chest x-ray surveys are conducted for a very definite purpose. The taking of films would, as an end in itself, accomplish little. The objective must be kept in mind. It is the use to which these films are put that counts. Therefore, every case where chest pathology is indicated calls for follow-up. This is the obligation of the local group which promotes the program. Before a person is x-rayed, he must state the name of a private physician to whom he is to be referred, in the event any abnormal condition is disclosed, and following the reading of the film the doctor is immediately notified. In the study under discussion each of the 2,278 cases of chest pathology found were, so far as is known, placed in the care of the private physician.

Tuberculosis is still a big problem. Because of lives saved during the earlier years and the increased life expectancy, the per cent of those who die of tuberculosis is increasing in the older age period and the emphasis of attack on this problem must be shifted accordingly. In 1945, which is the year for the latest available statistics, the median age of those who died from this disease was 44. This means that for those who succumbed to the disease there was an average loss of 29 potential years of life, the normal expectancy of anyone who attained the age of 44. In comparison, the median age of all who died from cancer that year was 64 years, and an average life expectancy of 14 years was lost; while the median age of those who died as a result of heart disease was 68 years, with an average of 11 years being lost.

Discussion was led by Drs. Paul D. Crimm, Evansville; M. R. Lohman, Fort Wayne, and Thomas R. Owens, Muncie. A general discussion followed and the committee approved both programs.

An x-ray conference of the Indiana Chapter of the American College of Chest Physicians concluded the program. The x-ray exhibits of interesting cases from the different institutions sponsored by the Tuberculosis Committee were accepted by the conference.

The committee met again April 18, 1948, at the Columbia Club in Indianapolis. A full attendance was present. A discussion of the registration of the positive sputum cases was conducted and the work of the state board of health was approved, with the proviso that such information should be confidential. A discussion of the x-ray survey work was opened by Dr. L. A. Malone of Terre Haute and Dr. L. G. Ericksen of South Bend. It was suggested that many known cases of tuberculosis would have the free x-ray service and such cases should not be listed as another case of tuberculosis. The committee unanimously approved the tuberculosis exhibit that was started at the last annual meeting and advised that another exhibit be provided for the 1948 annual meeting with additional features.

The Indiana Chapter of the American College of Chest Physicians also had a program including, (1) "Mediastinal Tumors," by Dr. J. V. Thompson, Indianapolis; (2) "Value of the Planograph in Chest Conditions," Dr. Philip Cohn, New Albany; (3) "Pleural Effusion," Dr. Edwin W. Custer, South Bend, and an x-ray conference.

James H. Stygall, M.D., *Chairman,*
Philip H. Becker, M.D.,
L. C. Marshall, M.D.,
J. V. Pace, M.D.,
J. S. McBride, M.D.,
T. R. Owens, M.D.,
L. A. Malone, M.D.,
Lester G. Ericksen, M.D.

COMMITTEE ON VENEREAL DISEASE

House of Delegates,
Indiana State Medical Association.

Gentlemen:

As nothing of sufficient importance has come to the attention of this committee during the past year to warrant the calling of a meeting, the committee has no report to make at this time. However, during the year the Venereal Disease Committee, in conjunction with the state board of health, has sent out two reprints to all the physicians of the state. These reprints have been written by outstanding authorities in the field of syphilotherapy and contained evaluations of the status of penicillin treatment, up to the present time, in different types of syphilis. These articles did not represent the opinion of the state board of health or the Venereal Disease Committee, but they did contain valuable information which the committee thought it well to distribute to the physicians of the state.

F. R. N. Carter, M.D., *Chairman,*
E. O. Nay, M.D.
Ernest Rupel, M.D.
T. R. Hayes, M.D.
W. C. McCormick, M.D.
Don Kelly, M.D.
Minor Miller, M.D.
A. E. Newman, M.D.

COMMITTEE ON VETERAN'S AFFAIRS AND REHABILITATION

House of Delegates,
Indiana State Medical Association.

Gentlemen:

A considerable reduction in medical service rendered to veterans in their communities for service-connected disabilities has been noted. This is the result of two factors: diminution in the necessity for such care as a result of less demand

for treatment of progressively improved service-connected disabilities; and secondly, the increased demand for dental care taking priority over medical care in allocation of funds by the Veterans Administration.

Early in the year of 1948 the Veterans Committee took aggressive steps in answering the criticism by Doctor Magnuson with respect to irregularities in fees and inadequate service to veterans by doctors in their home communities. Instances of such irregularities which occurred in Indiana were minimal in number—less than five—and had been handled promptly and in proper manner.

The inadequacies in the fee schedule pertaining to x-ray therapy and examinations were corrected by obtaining a revised schedule of fees for such items which was satisfactory to the Indiana Roentgen Society. Renewal of the agreement between the Indiana State Medical Association and the Veterans Administration was effective July 1, 1948, for a period of twelve months and included clauses which provided for prompt correction of items on the fee schedule.

This committee assumed the duties of the Emergency Medical Service Committee in accordance with the request from the Council of the state association, under date of July 11, 1948. Such duties include direction of defense measures in the event of national emergency, in compliance with plans originating from the Emergency Committee of the American Medical Association. Accordingly this committee now is the Liasion Committee of the state association between the Council on National Emergency Medical Service of the American Medical Association and the component societies of the state association.

The Veterans Administration has been requested to provide sufficient copies of the existing agreement for outpatient services to veterans, including the fee schedule covering such service to provide a supplement in bulletin form to THE JOURNAL of the Indiana State Medical Association at an early date.

CHARLES F. THOMPSON, M.D., *Chairman,*
GLEN W. LEE, M.D.
W. W. WASHBURN, M.D.
WILLIAM H. GARNER, M.D.
DUDLEY A. PFAFF, M.D.
FRANK B. RAMSEY, M.D.
JOHN S. HASH, M.D.

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Ray Elledge, Hammond (Lake)
Harry R. Kerr, Indianapolis (Marion)
Lee Maris, Attica (Fountain-Warren)
Paul D. Crimm, Evansville (Vanderburgh)

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INDIANA STATE MEDICAL ASSOCIATION
INDIANAPOLIS, INDIANA
October 26, 27 and 28, 1948

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Truman E. Caylor, Bluffton	Thomas O. Dorrence, Bluffton
WHITE	
W. H. Hibner, Monticello	H. W. Greist, Monticello
WHITLEY	
B. F. Pence, Columbia City	O. F. Lehmberg, Columbia City



in congestive heart failure . . .

"Aminophyllin may be given in the form of rectal suppositories (0.25 to 0.5 Gm.) or intravenously (0.24 Gm. in 50 cc. of fluid, 0.48 Gm. in 100 cc. of fluid), both for its diuretic effect and for its bronchodilating action, which relieves dyspnea."[1]

SEARLE **AMINOPHYLLIN** *

—meets the various dosage form requirements for congestive heart failure, bronchial asthma, paroxysmal dyspnea and Cheyne-Stokes respiration. It is supplied for oral, parenteral and rectal use.
G. D. Searle & Co., Chicago 80, Illinois

ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

SEARLE

Research in the Service of Medicine

1. Orgain, E. S.: The Treatment of Congestive Heart Failure, Narth Caralina M. J. 8:125 (March) 1947.

*Searle Aminaphyllin cantains at least 80% af anhydraus theaphylline.

TECHNICAL EXHIBITORS

	Booth Number
ABBOTT LABORATORIES, North Chicago, Ill.	28
AKRON SURGICAL HOUSE, Inc., 221 N. Pennsylvania St., Indianapolis, Ind.	62–63
THE ALKALOL COMPANY, Taunton, Mass.	3
A. S. ALOE COMPANY, 1831 Olive St., St. Louis, Mo.	79
AMERICAN HOSPITAL SUPPLY CORPORATION, 2020 Ridge Ave., Evanston, Ill.	72
AMERICAN OPTICAL COMPANY, 333 Bankers Trust Bldg., Indianapolis, and 10 S. Wabash Ave., Chicago, Ill.	89
AMES COMPANY, INC., Elkhart, Ind.	34
ARMOUR LABORATORIES, 1425 W. 42nd St., Chicago, Ill.	5
AUDIO DEVELOPMENT COMPANY, 30 N. Michigan Ave., Chicago, Ill.	86
THE BAKER LABORATORIES, INC., 2000 W. 14th St., Cleveland, Ohio	44
BILHUBER-KNOLL CORPORATION, Crane St., Orange, N. J.	36
THE BORDEN COMPANY, 350 Madison Ave., New York, N. Y.	25
BROOKS APPLIANCE COMPANY, 5 N. Wabash Ave., Chicago, Ill.	39
BURROUGHS WELLCOME AND COMPANY, INC., 9-11 E. 41st St., New York, N. Y.	51
CAMEL CIGARETTES, 1 Pershing Square, New York, N. Y.	1–2
CAMERON SURGICAL SPECIALTY COMPANY, 666 W. Division St., Chicago, Ill.	23
THE CARNATION COMPANY, Oconomowoc, Wis.	42
THE CENTRAL PHARMACAL COMPANY, Seymour, Ind.	9
CIBA PHARMACEUTICAL PRODUCTS, INC., LaFayette Park, Summit, N. J.	60
THE COCA-COLA COMPANY, Atlanta, Ga.	82
CURTIS AND FRENCH, 1108 N. Pennsylvania St., Indianapolis, Ind.	91–92
DAIRY COUNCILS OF INDIANA, 155 E. Market St., Indianapolis, Ind.	73
DICK X-RAY COMPANY, INC., 443 N. Pennsylvania St., Indianapolis, Ind., and 3976 Olive St., St. Louis, Mo.	87
THE DIETENE COMPANY, 518 Fifth Ave., S., Minneapolis, Minn.	67
THE DOHO CHEMICAL CORPORATION, 58 Varick St., New York, N. Y.	31
EDIPHONE—VAN AUSDALL & FARRAR, 28 S. Pennsylvania St., Indianapolis, Ind.	88
ENCYCLOPAEDIA BRITANNICA, 20 N. Wacker Drive, Chicago, Ill., and 320 N. Meridian St., Indianapolis, Ind.	80
H. G. FISCHER & CO., 2323-2345 Wabansia Ave., Chicago, Ill.	4
C. B. FLEET COMPANY, INC., 921-927 Commerce St., Lynchburg, Va.	49
THE FOREGGER COMPANY, INC., 55 W. 42nd St., New York, N. Y.	11
FREEMAN X-RAY COMPANY, 4647 N. Cicero Ave., Chicago, Ill.	6–7
GENERAL ELECTRIC X-RAY CORPORATION, 4855 W. McGeoch Ave., Milwaukee, Wis.	57–58
GERBER PRODUCTS COMPANY, Fremont, Mich.	21
J. E. HANGER, INC., 1407 N. Illinois St., Indianapolis, Ind.	48
HANOVIA CHEMICAL & MFG. CO., Newark, N. J.	70
HOLLAND-RANTOS COMPANY, INC., 551 Fifth Ave., New York, N. Y.	59
INVISIBLE LENS SERVICE, INC., 427 Medical Centre, 333 Linwood Ave., Buffalo, N. Y.	18
C. B. KENDALL COMPANY, 2039 Madison Ave., Indianapolis, Ind.	64
LANTEEN MEDICAL LABORATORIES, INC., 900 N. Franklin St., Chicago, Ill.	84
LEDERLE LABORATORIES DIVISION, American Cyanamid Company, 30 Rockefeller Plaza, New York, N. Y.	46
ELI LILLY AND COMPANY, Indianapolis, Ind.	47
J. B. LIPPINCOTT COMPANY, East Washington Square, Philadelphia, Penn.	22
M & R DIETETIC LABORATORIES, INC., 585 Cleveland Ave., Columbus, Ohio	52
MEAD JOHNSON & COMPANY, Evansville, Ind.	10
THE MEDICAL PROTECTIVE COMPANY, Fort Wayne, Ind.	26–27
THE C. V. MOSBY COMPANY, 3207 Washington Blvd., St. Louis, Mo.	54
V. MUELLER & COMPANY, 408 S. Honore St., Chicago, Ill.	68
MUTUAL MEDICAL INSURANCE, INC., 54 Monument Circle, Indianapolis, Ind.	81
NATIONAL DRUG COMPANY, 4663-85 Stenton Ave., Philadelphia, Pa.	61
ORTHO PHARMACEUTICAL CORPORATION, Raritan, N. J.	43
PARKE, DAVIS & COMPANY, Detroit 32, Mich.	56
PET MILK SALES CORPORATION, 1401 Arcade Building, St. Louis, Mo.	50
PHILIP MORRIS & COMPANY LTD., INC., 119 Fifth Ave., New York, N. Y.	74
PICKER X-RAY CORPORATION, 300 Fourth Ave., New York, N. Y.	40–41
PITMAN-MOORE COMPANY, 1220 Madison Ave., Indianapolis, Ind.	20
PROFESSIONAL EQUIPMENT COMPANY, 615 S. Peoria St., Chicago, Ill.	17
RICKRICH SURGICAL SUPPLY COMPANY, 801 W. Indiana St., Evansville, Ind.	14
W. B. SAUNDERS COMPANY, West Washington Square, Philadelphia, Pa.	38
SCHENLEY LABORATORIES, INC., 350 Fifth Ave., New York, N. Y.	30
SCHERING CORPORATION, 2 Broad St., Bloomfield, New Jersey	8
G. D. SEARLE & CO., P. O. Box 5110, Chicago, Ill.	83
SEVEN-UP BOTTLING COMPANY, Indianapolis, Ind.	16
SHARP & DOHME, INC., P. O. Box 7259, Philadelphia, Pa.	32
THE SMITH-DORSEY COMPANY, Lincoln, Neb.	85
SOUNDSCRIBER SALES AND SERVICE, 424 N. Meridian St., Indianapolis, Ind.	12
SPENCER, INC., 137 Derby Ave., New Haven, Conn.	33
E. R. SQUIBB & SONS, 745 Fifth Ave., New York, N. Y.	69
SWIFT & COMPANY, Union Stock Yards, Chicago, Ill.	29
U. S. VITAMIN CORPORATION, 250 E. 43rd St., New York, N. Y.	53
THE UPJOHN COMPANY, Kalamazoo, Mich.	37
THE WARREN-TEED PRODUCTS COMPANY, 582 W. Goodale St., Columbus, O.	35
WESTWOOD PHARMACAL CORPORATION, 463 Dewitt St., Buffalo, N. Y.	55

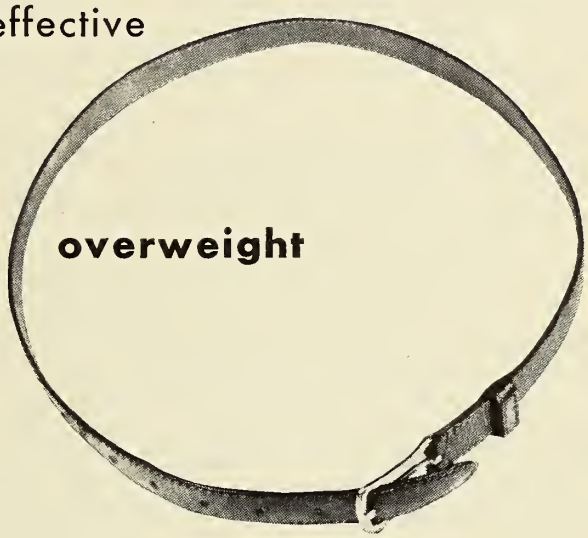
(continued on page 1090)





safe . . . rational . . . effective

in the treatment of **overweight**



Harris, Ivy and Searle conclusively proved that 'Benzedrine' Sulfate, *alone*, safely depresses the overweight patient's appetite—and when caloric intake is sufficiently lowered, weight reduction is facilitated.

After a comprehensive series of functional tests, these same investigators conclude: "No evidence of deleterious effects of the drug (amphetamine sulfate) were observed." (J.A.M.A.134:1468[Aug.23] 1947.)

Smith, Kline & French Laboratories, Philadelphia

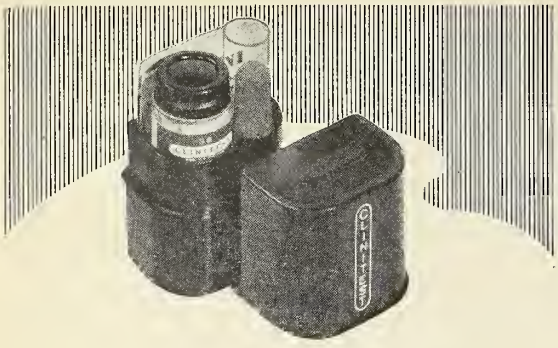
Benzedrine Sulfate tablets • elixir

(*racemic amphetamine sulfate, S.K.F.*)

One of the fundamental drugs in medicine

'BENZEDRINE' T.M. REG. U.S. PAT. OFF.

ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION



"An excellent simple presumptive test for routine use in the diagnosis of diabetes."[1]

CLINITEST

THE TABLET *NO-HEATING* METHOD FOR DETECTION OF URINE-SUGAR

SIMPLE TECHNIC—"My experience with Clinitest has convinced me beyond a shadow of a doubt that they are *the simplest* from the technical standpoint . . ."[2]

SELF-GENERATING HEAT—"The reagent tablet, known as the Clinitest Urine Sugar Tablet . . . generates heat when dissolved and the use of externally applied heat is not required . . ."[1]

Clinitest—simple, speedy, compact, convenient—is distributed through regular drug and medical supply channels.

1. Kasper, J. A. and Jeffrey, I. A.: A Simplified Benedict Test for Glycosuria, Amer. J. Clin. Pathology, *14*:117-21 (Nov.) 1944.

2. Haid, W. H.: The Use of Screening Tests in the Clinical Laboratory, J. Amer. Med. Tech., *8*:606-14 (Sept.) 1947.

Identification cards for the protection of your diabetic patients now available free upon request.

AMES COMPANY, INC.
ELKHART, INDIANA

(continued from page 1088)

	Booth Number
WHITE-HAINES OPTICAL COMPANY, Hume Mansur Bldg., Indianapolis, Ind.	90
WHITE LABORATORIES, INC., 113 N. 13th St., Newark, New Jersey	78
WINTHROP-STEARNS, INC., 170 Varick St., New York, N. Y.	15
MAX WOCHER & SON COMPANY, 609-611 College St., Cincinnati, O.	66
WYETH INCORPORATED, 1600 Arch St., Philadelphia, Pa.	71

ABBOTT LABORATORIES—BOOTH 28

AWAITING YOU HERE!

An entirely new exhibit specially prepared to excite your interest and attention. Abbott Professional Representatives eager to greet you and discuss the newer developments in medicine.

Make a visit to Booth 28 a **MUST** on your itinerary!

AKRON SURGICAL HOUSE, INC.
BOOTHS 62 and 63

The latest designs in physician's and reception room furniture by Hamilton will be featured by the Akron Surgical House, Inc. New diagnostic and surgical instruments will also be shown.

THE ALKALOL COMPANY—BOOTH 3

This exhibit features Alkalol, the balanced, alkaline, saline solution for the treatment of mucous membranes and irritated tissues. It is bland, nontoxic and effective, and has been a favorite since 1896. We are also showing Irrigol, a powder which in solution makes an aseptic, slightly astringent vaginal douche. It is widely used also for colonic irrigations and as an effective rectal enema.

Representatives in attendance are Mr. Carroll T. Bristol and Mr. Harry M. Moss.

A. S. ALOE COMPANY
BOOTH 79

Messrs. Earl P. Garson, Ed L. Rattner and George C. Fisk, representatives of the A. S. Aloe Company, will welcome their friends in Booth No. 79, where they will show a representative cross section of Aloe's complete line of surgical and hospital equipment and supplies. Also, they have samples of many new government surplus items at from one-third to one-half regular prices.

AMERICAN OPTICAL COMPANY—BOOTH 89

Our Scientific Instrument Division will have a display of medical microscopes, the new Spencer blood count instrument with which the physician takes the blood count right at the patient's bedside, and other instruments of interest to the medical profession. Diagnostic equipment and trial cases for ophthalmologists also will be shown. L. H. Mitchell and E. V. Finnegan, representatives, will be in charge.

AMES COMPANY, INC.—BOOTH 34

Ames Company representatives will be glad to discuss Decholin, the standard hydrocholeretic agent for the treatment of biliary tract diseases, and Decholin Sodium, pure sodium dehydrocholate.

They will be demonstrating Clinitest and Hematest —simplified tests for the detection of urine-sugar and occult blood.

THE ARMOUR LABORATORIES—BOOTH 5

The Armour Laboratories, a pioneer in the field of Endocrinology, will welcome members of the Indiana State Medical Association to visit the Armour exhibit in Booth 5. If you have not received copies of the Armour booklets on "The THYROID GLAND," "Function and Malfunction of the Biliary System," and the "Armour ATLAS of Hematology," you may secure them at the Armour booth.

AUDIO DEVELOPMENT COMPANY—BOOTH 86

The ADC Audiometers are a major contribution of the Audio Development Company to the field of scientific hearing testing.

ADC's engineering leadership has made ADC Audiometers the most **versatile** hearing test instruments in the field today.

The Deluxe Model 50-E Audiometer has the following special features:

Permits actual speech hearing loss tests.
Simplified hearing loss dial.
Calibrated masking control.
Equal loudness control.
Accessory turntable attachment.

The ADC Portable Model 53 has the following features:

Double air receivers.
Bone conduction.
Masking control.
Speech circuit.
Fast acting tone switch.
Instant automatic tuning.
Uniform zero reference level.

Never before has there been such a small, lightweight portable with these features. Stop at our display and let Mr. John W. Bourke demonstrate these outstanding instruments for you.

THE BAKER LABORATORIES, INC.—BOOTH 44

The Baker display is built around the six-step approach to optimum infant nutrition which leads to the picture of the happy mother and the healthy child. An adjusted protein, two carbohydrates, a modified fat, vitamins, soluble mineral salts and iron, coupled with simplicity of preparation and low cost, provide for complete nutrition and insure cooperation in the home. Baker's Modified Milk, liquid or powder, may be used interchangeably from birth to the end of the bottle-feeding period. May we discuss your infant feeding problem with you?

BILHUBER-KNOLL CORP.—BOOTH 36

A prescription is written evidence of the physician's skill in the treatment of a disease. The Bilhuber-Knoll Corp. presents Dilaudid, Metrazol, Theocalcin, Bromural, Octin and other fine medicinal chemicals that have established their place in the physician's individualized prescriptions.

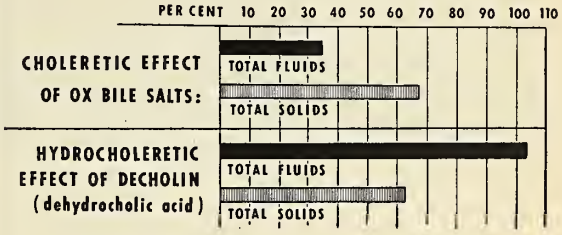
Your visits to their Booth No. 36 and your discussions of their prescription chemicals will be welcomed.

THE BORDEN COMPANY—BOOTH 25

Spend a few pleasant minutes with Borden at Booth No. 25 and refresh your memory on our prescription products. Meet BIOLAC, a liquid modified milk for infant feeding; DRYCO with its high-protein, low-fat content for formula flexibility; MULL-SOY, a liquid hypo-allergenic soy food for your milk allergic patients; powdered whole milk KLIM, a dependable source of whole milk; the improved milk sugar, BETA LACTOSE, for carbohydrate supplementation; and the powdered MERRELL-SOULE PROTEIN AND LACTIC ACID MILKS for special infant feeding cases.

We invite your attention to PROTOLAC, a new especially-formulated blend of intact proteins and high protein products derived from animal and vegetable sources. PROTOLAC is supplemented with choline and the amino acid cystine. PROTOLAC is indicated in high protein therapy in conditions requiring increased dietary protein of optimum nutritional value.

DECHOLIN HYDROCHOLERESIS Encourages Biliary Tract Drainage



● **Percentage Increase in Composition and Quantity of Bile Flow**

Ivy, A. C., et al: Am. J. Dig. Dis. 7:333 (Aug.) 1940.

HYDROCHOLERESIS—

an increased production of thin liver bile—is a desirable approach to therapy of non-obstructive biliary tract disturbances.

DECHOLIN—

by producing an increased flow of bile—washes stagnant, infected bile from the intrahepatic and extrahepatic biliary passages, removing pus-laden material and discouraging the ascent of infection.

HOW SUPPLIED:

Decholin in 3¾ *gr. tablets. Packages of* 25, 100, 500 *and* 1000.

Decholin
BRAND • REG. U. S. PAT. OFF.
(DEHYDROCHOLIC ACID)

ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

AMES COMPANY, INC.
ELKHART, INDIANA

BROOKS APPLIANCE COMPANY—BOOTH 39

W. C. Ayer will have charge of the Brooks Appliance Company exhibit and will describe in detail the technique of applying the combination pressure bandages, Contura plus Pressoplast, which are used in treating osteo-arthritis of the knee joints, phlebitis and varicose leg ulcers.

Proctological instruments, syringes, needles and elastic hosiery will also be displayed.

BURROUGHS WELLCOME & CO., INC.—BOOTH 51

Among significant products featured will be 'WELLCOME' GLOBIN INSULIN, which provides an action which is timed to be more suitable for the average diabetic; 'DEXIN' brand High Dextrin Carbohydrate, in which the nonfermentable proportion predominates; DIGOXIN, the pure, stable, crystalline glycoside which offers predictable digitalization; and 'METHEDRINE,' a recent sympathomimetic drug of wide therapeutic application.

CAMEL CIGARETTES—BOOTHS 1 and 2

CAMEL Cigarettes will present a dramatic, full-color review of their recent medical research on smoking, as well as the details of the nation-wide survey showing that "More Doctors Smoke Camels Than Any Other Cigarette." Another panel will illustrate the absorption of nicotine in the respiratory tract. Representatives will be present.

CAMERON SURGICAL SPECIALTY COMPANY—BOOTH 23

Have a demonstration of the Cameron Cauterodynes and Cauteradios for Electro-surgery, Electrocauterization and Electro-coagulation; Coagulair-Sigmoidoscope; Electro-Diagnostic Lamps and Instrument Sets; Radiolucent Cannula; the new Flexible Gastroscopes with treated and coated lenses; Flexible Esophagoscope; Bronchoscopes—Esophagoscopes—Laryngoscopes; Mirror Headlites; Binocular Spectacle Loupe; Magniscope and other Specialties.

CARNATION COMPANY—BOOTH 42

You are invited to visit booth No. 42, where you will see an attractive display on Carnation Evaporated Milk—"the milk every doctor knows." Some valuable information on the use of this milk for infant feeding, child feeding, and general diet will be presented and the method by which Carnation is generously fortified with pure crystalline Vitamin D—400 U.S.P. units per reconstituted quart—will be explained. Interesting literature will also be available for distribution.

THE CENTRAL PHARMACAL COMPANY—BOOTH 9

The Central Pharmacal Company display will feature the Synophylate line, consisting of Tablets Synophylate, Syrup Synophylate, Suppositories Synophylate and Tablets Synophedal. Synophylate is a Council Accepted drug.

Synophylate or Theophylline Sodium Glycinate represents a recognized advancement in Theophylline therapy, and a drug which is superior to Aminophylline U.S.P. in several respects, including better patient toleration. The announcement of Synophylate to the medical profession constituted removing the dosage barrier which has always existed with other theophylline compounds, including ethylenediamine theophylline. Thus, physicians are offered a new and better drug for the effective treatment of many cardiac and asthmatic conditions.

In addition, Entabs and Syrup Neocylate will be prominently displayed. The Neocylate formula represents the first real advancement in salicylate therapy for over twenty years. The announcement of these products placed a new and superior formula in the hands of the medical profession for the treatment of rheumatic fever and other rheumatoid and arthritic conditions.

Other original and very useful ethical specialties will be displayed, and authoritative information on all products will be available to our friends in the medical profession which we proudly serve.

CIBA PHARMACEUTICAL PRODUCTS, INC.—BOOTH 60

The Ciba exhibit of "Economical Hormone Therapy" will feature METANDREN Linguets, the most potent oral androgen in tablets, designed for absorption through sublingual mucosa; LUTOCYLOL Linguets, orally effective progestogen especially designed for sublingual absorption; and ETHINYL ESTRADIOL, the most potent oral estrogen.

Representatives in attendance will gladly furnish literature and answer questions about these and other Ciba products.

CURTIS & FRENCH—BOOTHS 91 AND 92

Curtis & French will have several new items of interest for you, and the same gang there to show you how to use them. See you at the Convention!

DAIRY COUNCILS OF INDIANA—BOOTH 73

The Dairy Councils of Indiana will feature an exhibit which shows a meal-planning pattern of good nutrition and health for both adults and children. You are cordially invited to stop at the Dairy Council booth and examine our attractive health education materials.

The exhibit is sponsored by the Dairy Councils of Evansville, Fort Wayne, Indianapolis, Kokomo, Peru, and South Bend. These units are affiliated with the National Dairy Council of Chicago, which is the health education organization of the dairy industry.

Dairy Council services and materials are free of charge in the localities which have affiliated units.

THE DICK X-RAY COMPANY—BOOTH 87

The Dick X-Ray Company will have on display: Westinghouse X-Ray Equipment—Liebel-Flarsheim Short Wave Machines—Cambridge "Simpli-trol" Portable Electrocardiograph — Fluorescent Viewers — Physiotherapy Equipment.

THE DIETENE COMPANY—BOOTH 67

Visit The Dietene Company exhibit and discover that really palatable high protein diet supplement—MERITENE. Smell it—taste it—and be convinced.

Also see the personal type diet service that is available, without charge, to physicians. DIETENE Reducing Supplement and the 1,000 calorie Dietene Reducing Diet will also be on display.

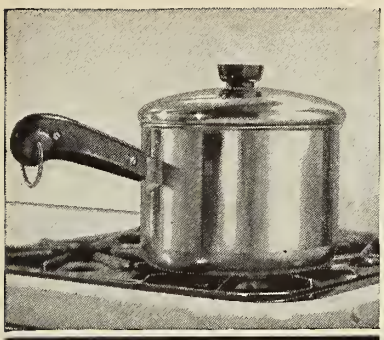
Both MERITENE and DIETENE are Council-Accepted.

THE DOHO CHEMICAL CORPORATION BOOTH 31

The makers of Auralgan are featuring at this meeting their new sulfa preparation Otosmosan, indicated in the treatment and control of chronic suppurative ears.

Also Mallon, Division of Doho, is introducing our new topical anesthesia, Rectalgan, for relief of pain and itching in hemorrhoids and pruritus. This new therapy enjoys many advantages over the outmoded rectal suppositories and ointments.

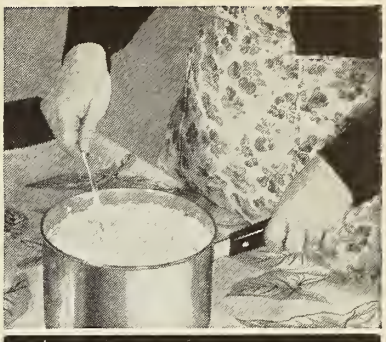
Our representatives will be happy to explain in detail, the workings of these medications.



1. Boil the water and cool to luke-warm



2. Float measured powder on top of the water



3. Mix with a large spoon or fork

SIMILAC FEEDINGS ARE Easy TO PREPARE

It takes only 30 seconds to induce solution *if the powder is floated on top of the water.* Lukewarm, boiled water is desirable.

No need to mix several ingredients—hence the possibility of errors in measurement is greatly reduced.

The ratios of fat, sugar, and protein, *and the zero curd tension,* remain constant regardless of concentration . . . Therefore, no gastrointestinal disturbance will normally occur, should the mother err occasionally in counting the number of measures of Similac powder.

The level tablespoon measure in each can eliminates the possibility of underfeeding or overfeeding due to varying sizes of "tablespoons."

Result: Similac reduces dietary disturbances traceable to mothers' errors in preparation of the formula

RESEARCH M&R NUTRITION SERVICE

SIMILAC . . . a dependable food during the all-important first year



ACCEPTED INFANT FORMULA AMERICAN MEDICAL ASSOCIATION

M & R DIETETIC LABORATORIES, INC. • COLUMBUS 16, OHIO

EDIPHONE
VAN AUSDALL & FARRAR—BOOTH 88

Ediphone Voicewriting instruments, manufactured by Thomas A. Edison, Incorporated, will be presented by Van Ausdall & Farrar, Indiana Distributors, with offices at Indianapolis, Evansville, and Fort Wayne. This exhibit will feature Edison's new postwar Electronic instruments, plastic disc and cylinder types. True fidelity voice recording, so important for the use of medical terms, now becomes available to the physician and surgeon. Mr. L. E. Grisso and Mr. C. F. Farrar will be on hand in Booth 88 to demonstrate these instruments to you.

ENCYCLOPAEDIA BRITANNICA, INC.—BOOTH 80

The more than 38,000,000 words contained in the 1948 printing of Encyclopaedia Britannica are equivalent to more than 160 miles of words!

The 24 volumes, with its 27,200 pages and 17,588 illustrations, in the 1948 printing, contain many new articles and pictures and a revision over previous printings of over 2,000,000 words. Over 200,000 words were revised in the index volume alone.

Many of the articles relate to Atomic Energy; however, there are new articles on such things as: Sexual Behavior, Artificial Parthenogenesis, Coenogenesis, Electron Microscopy, and many others. The 17,588 illustrations constitute an extensive gallery of carefully chosen color plates, superb half-tones and technically correct line drawings. In many cases a Britannica illustration is the only authentic visual representation of a subject available anywhere. The new index volume contains over a half million references and cross references, and is the key to the entire work, making it possible to find the most illusive subject with ease.

Walter Yust, editor of Encyclopaedia Britannica, makes the statement that "The aim of the Encyclopaedia Britannica's editors has been to sift the vast store of available knowledge and render its essential part accessible to all who read."

H. G. FISCHER & CO.—BOOTH 4

In the booth of H. G. Fischer & Co. see new units of Fischer X-ray and Electro-Surgical-Medical apparatus. Let us demonstrate applications of new F.C.C. Type Approved Diathermy units. Your visit will be welcome and appreciated.

C. B. FLEET CO., INC.—BOOTH 49

C. B. Fleet Co., Inc., cordially invites you to visit Booth No. 49. Increasingly, during the past fifty years, to the medical profession sodium phosphate has come to mean Phospho-Soda (Fleet), the pure, stable, aqueous concentrate of the two U.S.P. sodium phosphates.

THE FOREGGER CO., INC.—BOOTH 11

The Foregger Company will show equipment for Endotracheal Anesthesia, including some newly developed items of interest to surgeons, as well as anesthetists. Recent developments in anesthesia equipment will also be on display, including special equipment for anesthetizing newborn infants for the Blalock Operation, repair of cleft palate, and similar procedures.

J. E. HANGER, INC.—BOOTH 48

The J. E. Hanger Company, manufacturer of artificial appliances since 1861, wishes to extend to its friends of the Indiana State Medical Association a most cordial invitation to visit booth No. 48, where it has on exhibition various types of up-to-date prostheses for both lower and upper extremities. One of the latest developments of the industry, the suction socket limb, is on display, and the representative will be glad to explain its mechanism.

The past cooperation of the physicians and hospitals is, indeed, appreciated, and the continuation of this relationship is anticipated.

The exhibit is attended by J. G. Best and S. E. Hedges.

HANOVIA CHEMICAL & MANUFACTURING COMPANY
BOOTH 70

Don't fail to visit our booth. A complete line of ultra-violet equipment for orificial and general body radiation will be on display; also Radiant Heat Lamps.

Competent and courteous representatives will be on hand to greet you.

HOLLAND-RANTOS COMPANY, INC.—BOOTH 59

KOROMEX JELLY and KOROMEX CREAM will be featured at booth 59. You may recall it was the Holland-Rantos Company, Inc., that pioneered the introduction of modern contraceptive technique—so frequently referred to as **the Koromex Method.** The medical background and clinical use of KOROMEX JELLY dates back to 1925. Medical service representatives will be on hand to discuss with interested physicians the latest data on KOROMEX JELLY and CREAM.

C. B. KENDALL COMPANY—BOOTH 64

GREETINGS to the Members of the Indiana State Medical Association.

The C. B. Kendall Company offers you a fine selection of pharmaceutical and medicinal specialties. We are an ethical house, specializing in quality merchandise for the trade only.

Five products which merit your discerning consideration are:

FEBEX—Tops in *Liver and Iron Therapy because of the addition of Ox-Bile Extract.
*Liver-B Vitamins Concentrate, U.S.P. XII.

DEEGIANS—The tablet that reduces weight without patient fatigue.

BELBROTONE—an unusually palatable preparation for the nervous stomach.

PALAGREN—A highly effective, yet very pleasant-tasting sedative.

FUSINOL—a superior germicide and fungicide, embodying improvements on Castellani's Paint—acclaimed by skin specialists throughout the country.

We also offer the first 50 mg. Testosterone, injectable—as well as our complete line of injectables, tablets, ointments, liquids and powders.

With true Hoosier hospitality, we offer you our services and extend a warm welcome to you to visit our plant at 2039 Madison Avenue, in Indianapolis.

LANTEEN MEDICAL LABORATORIES, INC.—BOOTH 84

LANTEEN MEDICAL LABORATORIES, INC., extend an invitation to visit their exhibit in booth No. 84. The improved LANTEEN FLAT SPRING DIAPHRAGM will be featured, and representatives will be pleased to discuss a new diaphragm-fitting technique. Other pharmaceutical products will also be displayed.

LEDERLE LABORATORIES DIVISION
AMERICAN CYANAMID COMPANY
BOOTH 46

You are cordially invited to visit our exhibit in Booth 46, where you will find representatives who are prepared to give you the latest information on Lederle products.

ELI LILLY AND COMPANY—BOOTH 47

Featured at the Lilly exhibit will be new therapeutic developments. Many Lilly products are to be on display; representative literature will be available. Lilly medical service representatives are to be in attendance to aid visiting physicians in every way possible.

middle age + mental ease



The woman in the climacterium may be disturbed by disquieting thoughts and foolish fears. Such mental anguish is oftentimes allayed when the physical symptoms associated with declining ovarian function have been relieved.

*"**Premarin,**" by bringing about remission of menopausal symptoms, restores mental ease in a majority of instances. Furthermore, there is a "plus" in "**Premarin**"...the gratifying "sense of well-being" usually experienced by the patient following administration of this naturally occurring, orally active estrogen.*

*Flexible dosage regimens to adapt treatment to the particular needs of the patient are made possible with "**Premarin**" Tablets of 2.5, 1.25, or 0.625 mg., and liquid—0.625 mg. per 4 cc. (one teaspoonful).*

*While sodium estrone sulfate is the principal estrogen in "**Premarin,**" other equine estrogens...estradiol, equilin, equilenin, hippulin...are probably also present in varying amounts as water soluble conjugates.*



ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

"PREMARIN"®

Ayerst

CONJUGATED ESTROGENS (equine)*

Ayerst, McKenna & Harrison Limited 22 East 40th Street, New York 16, New York

*Estrogenic Substances (water soluble) also known as Conjugated Estrogens (equine)

4818

J. B. LIPPINCOTT COMPANY—BOOTH 22

J. B. Lippincott Company presents an interesting and active exhibit of professional publishing. With the "pulse of practice" centering in an advisory editorial board of active clinicians who constantly review the field, current and coming trends in medicine and surgery are known continually. On the studied recommendations of these medical leaders, Lippincott Selected Professional Books are undertaken. It is upon their knowledge, too, of the outstanding work being done in general practice, as well as the specialties, that men making a very real contribution to medical progress are chosen to author the Lippincott books.

M & R DIETETIC LABORATORIES, INC.—BOOTH 52

M & R Dietetic Laboratories, Inc., Booth Number 52, will display Similac, a food for infants deprived either partially or entirely of breast milk. Messrs. A. O. Caldwell, A. E. Boodel and Don Doyle will appreciate the opportunity to discuss the merit and suggested application for both the normal and special feeding cases.

MEAD JOHNSON & COMPANY—BOOTH 10

Amigen and Protolysate will be on display at the Mead Johnson Exhibit at your Indiana State Medical Association meeting. Mead Johnson has pioneered the amino acid field commercially; the products have been described in more than 140 articles in the medical literature; this year they are available. Trained representatives will be at the Mead Exhibit to discuss details of the new amino acid products.

Shown also will be Dextri-Maltose, Pablum, Pabena, Oleum Percomorphum and the other Mead Products used in Infant Nutrition. Protenum, a new high-protein product will be displayed. Also, Lonalac, for low-sodium diets.

THE MEDICAL PROTECTIVE COMPANY—BOOTHS 26 and 27

The most exacting requirements of adequate liability protection are those of the professional liability field. The Medical Protective Company, specialists in providing protection for professional men, invites you to confer at their exhibit with the representatives there. They are thoroughly trained in Professional Liability underwriting.

PARKE, DAVIS & COMPANY—BOOTH 56

Members of the Medical Service Staff of PARKE, DAVIS & COMPANY will be available at our Commercial Exhibit for consultation and discussion relating to regular products classified in our Pharmaceutical, Biologic, and Medicinal Lists. Unusual specialties of recent development — Benadryl, Etamon Chloride, Oxycel, Thrombin Topical, Influenza Virus Vaccine, Antibiotics, Hypnotics, Amino Acids, and various Biologics will be featured in the exhibit. You are cordially invited to call at our exhibit with the assurance your interest will be much appreciated.

THE C. V. MOSBY COMPANY—BOOTH 54

A cordial invitation is extended all physicians attending the Indiana State Medical Association Convention to visit the C. V. Mosby Company display in Booth No. 54, where a wealth of new and timely medical literature will be available for examination. Some of the very new releases to be shown will include Crossen "Operative Gynecology," Pottenger "Tuberculosis," Gradwohl "Clinical Laboratory Methods and Diagnosis," Dunbar "Synopsis of Psychosomatic Diagnosis and Treatment," and Ilgenfritz "Preoperative and Postoperative Care."

V. MUELLER & COMPANY—BOOTH 68

The V. Mueller & Company exhibit will be in charge of their Indiana representative, Mr. Fred O. Hagan, who invites you to view some of the newer items for surgery and for your office.

MUTUAL MEDICAL INSURANCE, INC. BOOTH 81

Mutual Medical Insurance, Inc. (The Doctors' Plan) will have its exhibit on the north aisle in the big convention hall. A series of lighted panels on an attractive background tells the story of the doctors own prepayment plan for surgical and obstetrical care and the Blue Cross Plan for Hospital Care. Representatives of The Doctors' Plan will be on hand at all times to answer questions, discuss the various types of literature which are available, take orders for supplies, and be generally helpful in explaining the plans.

During the two years since it was organized, The Doctors' Plan has enrolled over 200,000 members in Indiana. One reason for its rapid growth has been the vigorous support of doctors in all parts of the state, both individually and through their county medical societies.

Dr. Walter U. Kennedy, Newcastle, is president of The Doctors' Plan; Dr. W. Harry Howard, Hammond, is vice-president; Dr. Walter L. Portteus, Franklin, is secretary; and Dr. A. F. Weyerbacher, Indianapolis, treasurer. These four, with Dr. C. J. Clark, Indianapolis, Dr. Wemple Dodds, Crawfordsville, and Dr. Jesse E. Ferrell, Fortville, serve as the executive committee for the Plan.

Administration of The Doctors' Plan is under the direction of R. S. Saylor, Executive Vice-President, 700 Test Building, Indianapolis.

THE NATIONAL DRUG COMPANY—BOOTH 61

PROTINAL POWDER will be one of the products featured at The National Drug Company booth. The only micro pulverized intact protein preparation commercially available, it has an exceptionally high protein content, yet is actually delicious. RESINAT—the completely non-toxic anion exchange resin for the treatment of peptic ulcer and gastric acidity—will also be featured. Trained professional service men will be on hand to give details on dosage and clinical results to be expected from these and other ethical specialties.

ORTHO PHARMACEUTICAL CORPORATION—BOOTH 43

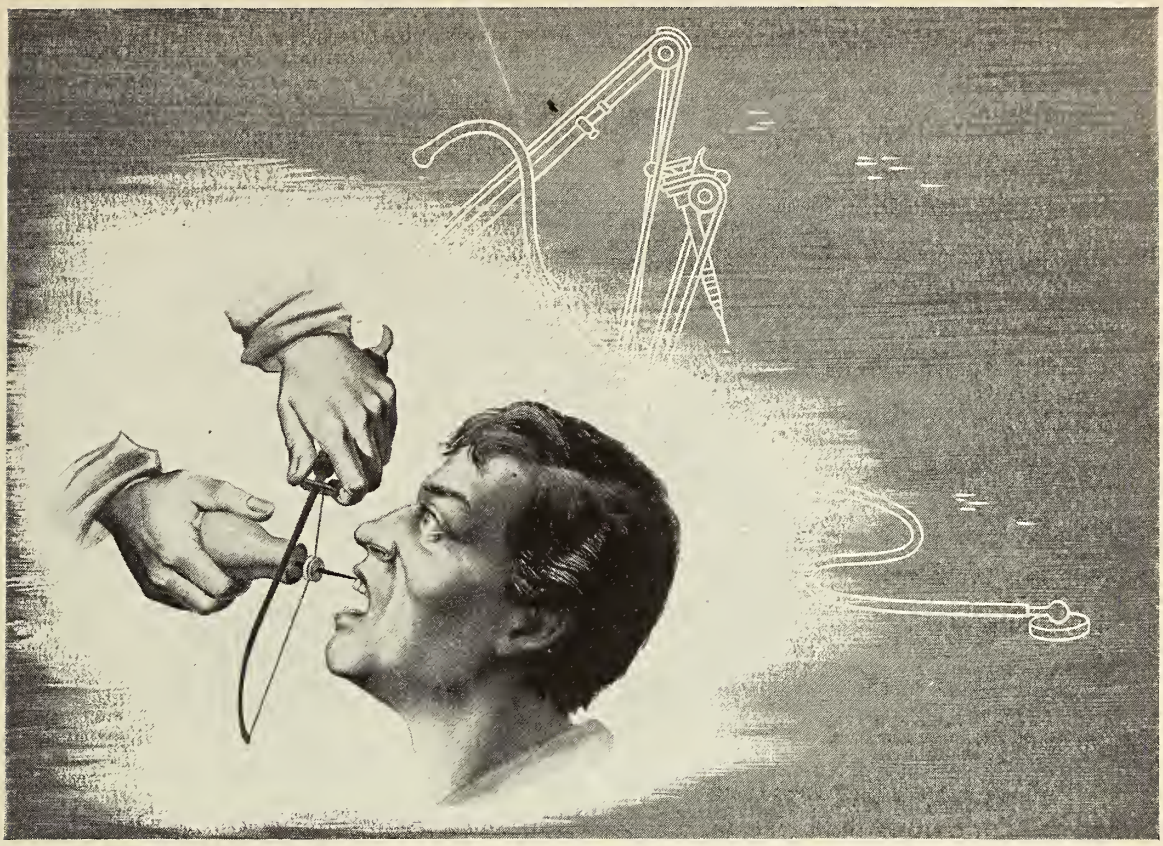
Ortho cordially invites you to visit their exhibit at Booth No. 43. Featured will be Ortho-Gynol, Ortho-Creme and other gynecological specialties. Ortho representatives will be on hand to discuss any of these products with you.

PET MILK COMPANY—BOOTH 50

A complete display of material illustrating the time-saving Pet Milk services available to physicians. Specially trained representatives will be in attendance to give you information about the production of Pet Milk and its use for infant feeding. Miniature cans will be given to physicians visiting the exhibit.

PHILIP MORRIS & COMPANY, LTD., INC.—BOOTH 74

Philip Morris & Company will demonstrate the method by which it was found that Philip Morris Cigarettes, in which diethylene glycol is used as the hygroscopic agent, are less irritating than other cigarettes. Their representative will be happy to discuss researches on this subject, and problems on the physiological effects of smoking.



The First Modern Dentistry...

Dentistry, in the story of its evolution from "tooth tinkering" to modern methods, cites the jeweler's "fiddle-bow" drill as the first of America's mechanical devices for the preparation of cavities.

This and later nineteenth century technical developments—Lewis' hand drill with adjustable head, the finger thimble and hand bur, the first modern dental chair, the advent of sponge or crystal gold for fillings, improvements in the manufacture of porcelain teeth, etc.—were paralleled by developments in the educational field:

In 1826 Leonard Koecker's scholarly *Principles of Dental Surgery* presaged the demise of practicing laymen—a prophecy that ripened with the founding of the first dental college at Baltimore in 1840. Chapin A. Harris' *American Journal of Dental Science*, published in 1849, heralded the coming of other early educational and fraternal magazines, some of which still serve the profession today.

★ ★ ★

Doctors Today (whose choice among schools, periodicals and varieties of dental equipment is virtually unlimited) choose the Medical Protective policy for malpractice protection—*complete, preventive and confidential.*

THE
MEDICAL PROTECTIVE COMPANY
FORT WAYNE, INDIANA

Professional Protection EXCLUSIVELY . . . *since 1899*

INDIANAPOLIS Office: Kenneth W. Moeller and J. P. Sanford, Representatives, 1112 Hume Mansur Bldg., Telephone Riley 1013

PICKER X-RAY CORPORATION—BOOTHS 40 and 41

Picker X-Ray Corporation will exhibit the "CENTURY" self-contained unit providing for Fluoroscopy and Radiography in all positions from the vertical to the trendelenberg.

This unit is shown as a 100 MA installation but it is obtainable also as a 200 milliampere unit.

There will also be on display numerous accessory items.

PITMAN-MOORE COMPANY—BOOTH 20

The Pitman-Moore display will feature several new advancements in medication, including the new Ultraviolet Irradiation-Killed Rabies Vaccine; Magmoid Sulco, a creamy liquid mixture of sulfonamides designed to reduce the danger of crystalluria; and Tablets Rutol, a new hypotensive with Rutin, for the purpose of reducing the dangers of capillary fragility.

Medical service representatives from this region and scientific personnel from the laboratories will be on hand to greet their friends in the profession.

RICKRICH SURGICAL SUPPLY COMPANY—BOOTH 14

Rickrich Surgical Supply Company, Evansville, deals in the nationally advertised lines of surgical equipment and supplies. Mr. Rickrich and Mr. George F. Carter invite all visitors to inspect their exhibit at Booth 14.

W. B. SAUNDERS COMPANY—BOOTH 38

This Company will be represented by Mr. Frank A. McMahon who will exhibit its full line of medical books, including Hyman's "Integrated Practice of Medicine," Bockus' "Gastro-enterology," Kinsey's "Sexual Behavior in the Human Male," Sollmann's "Pharmacology," Beckman's "Treatment," Todd & Sanford's "Clinical Diagnosis by Laboratory Methods," Christopher's "Minor Surgery," Dowling's "Acute Bacterial Diseases," Noyes' "Clinical Psychiatry," A.M.A. Interns' Manual, Brams' "Treatment of Heart Disease," Willius & Dry's "History of Heart and Circulation," Thorner's "Psychiatry in General Practice," Long's "Sulfonamide and Antibiotic Therapy," Bastedo's "Pharmacology, Therapeutics and Prescription Writing," Wechsler's "Clinical Neurology," Gifford & Adler's "Ophthalmology," American Illustrated Medical Dictionary, McCombs' "Internal Medicine in General Practice," Cecil's "Medicine," Wharton's "Gynecology and Female Urology," Rubin's "Diseases of the Chest and X-ray," Boyd's "Surgical Pathology," Duncan's "Diseases of Metabolism," DeLee & Greenhill's "Obstetrics," Ranson's "Anatomy of the Nervous System," History of the American Medical Association, and many others.

SCHENLEY LABORATORIES, INC.—BOOTH 30

The Schenley Laboratories' exhibit features standard penicillin products, Pelvicins, Rutaminal, and Titralac. Penicillinase, a valuable laboratory reagent, is available for inspection.

Rutaminal Tablets are a new Schenley product supplying rutin, aminophylline, and phenobarbital, intended for use in the management of various cardiovascular conditions.

Titralac is a new antacid with a titration curve resembling that of milk. The attendant will demonstrate the titration of Titralac in comparison with milk, by utilizing the Beckman pH meter.

SCHERING CORPORATION—BOOTH 8

Among the new pharmaceutical and hormone preparations developed in the Schering research laboratories, MICROPELLETS PROGYNON will be featured. This new potent form of the female sex hormone, alpha estradiol, provides maximum results at minimum cost to the patient. COMBISUL and COMBISUL LIQUID, the triple sulfonamide combinations which eliminate the dangers of sulfonamide renal damage, will also be presented. TRIMETON, the outstanding antihistaminic, will highlight the exhibit. Schering professional service representatives will be present to welcome you and will be happy to answer your inquiries concerning Schering's new products, as well as their other hormone, x-ray diagnostic, chemotherapeutic, and pharmaceutical specialties.

G. D. SEARLE & CO.—BOOTH 83

You are cordially invited to visit the Searle booth where our representatives will be happy to answer any questions regarding Searle Products of Research.

Featured will be Hydryllin, the new antihistaminic, as well as such time-proven products as Searle Aminophyllin in all dosage forms, Metamucil, Ketochol, Floraquin, Kiophyllin, Diodoquin, Pavatrine and Pavatrine with Phenobarbital.

SHARP & DOHME, INC.—BOOTH 32

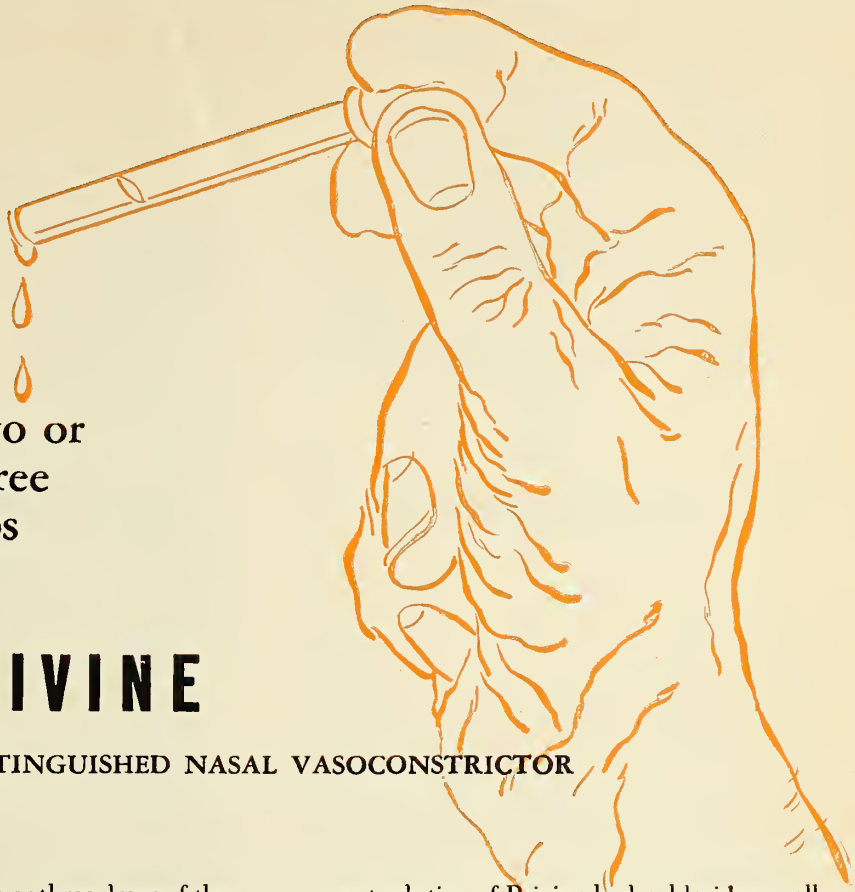
Sharp & Dohme extends a cordial welcome to all visitors at booth No. 32. Items on exhibit include a new dosage form of 'Delvinal' Sodium Vinbarbital for the production of obstetric amnesia and analgesia. New antibiotic preparations, including Tyrothricin along with 'Sulfathalidine' and 'Sulfasuxidine', intestinal bacteriostatic agents, are also being featured.

THE SMITH-DORSEY COMPANY—BOOTH 85

Injectable and oral preparations will be featured at The Smith-Dorsey exhibit. Al-Si-Cal Powder and Tablets which are specifically designed for the ulcer patient will be shown, Teotine Tablets for chronic heart conditions will be on display, and Ilban Capsules for secondary anemias and general tonic purposes will also be exhibited. The injectable material will cover a wide range of Council Accepted items which will be of interest to all physicians engaged in internal medicine. The Dorsey representatives welcome all physicians to their booth each day of the meeting.

SOUNDSCRIBER SALES AND SERVICE BOOTH 12

The exhibit will consist of various illustrative models of SoundScriber at work in several normal functions of a recording machine in the physician's or hospital room. SoundScribers will be used both as recording or dictating machines and as transcribing machines. Those interested may dictate and see the sound record transformed into a typed page. SoundScriber has had such wide acceptance by the medical profession that most of those who have visited national conventions have seen its recording operation but only those who own the machines have observed the ease, the comfort, the accuracy, and the speed with which the typist transcribes. This exhibit will illustrate both functions. The exhibit will be in charge of Seward B. Price, Indiana Distributor, assisted by Harrison Blind, Indianapolis representative.



only two or three drops

PRIVINE

A DISTINGUISHED NASAL VASOCONSTRICTOR

high potency Only two or three drops of the 0.05 per cent solution of Privine hydrochloride usually give prompt and complete relief of nasal congestion and hypersecretion.

prolonged action The effect of each application of Privine provides two to six hours of nasal comfort, thus avoiding the inconvenience of frequent re-application.

bland and non-irritating Privine is prepared in an isotonic aqueous solution buffered to a pH of 6.2 to 6.3. Artificial differences in osmotic pressure between solution and epithelium are avoided; stinging and burning are usually absent.

relatively free from systemic effects Although a sedative effect is occasionally noted in infants and young children — usually after gross overdosage — Privine is generally free of systemic effect. The absence of central nervous stimulation permits the use of Privine before retiring without interfering with restful sleep.

• CIBA PHARMACEUTICAL PRODUCTS, INC., SUMMIT, NEW JERSEY

Privine 0.05 per cent for all prescription purposes; 0.1 per cent strength reserved for office procedures.

Ciba

PRIVINE (brand of naphazoline) Trade Mark Reg. U.S. Pat. Off.

SPENCER, INCORPORATED—BOOTH 33

You are cordially invited to visit our exhibit of Spencer Individually Designed Supports for abdomen, back and breasts. The Spencer Spinal Support, designed to aid in the treatment of spinal curvatures and back injuries, and for wear following spinal operations, will be featured. The Spencerflex, a light, comfortable, masculine-looking support for men, will also be featured. This support improves posture, increases efficiency and helps prevent hernia. It is especially suited for postoperative wear. The Spencer Breast Form, which conceals disfigurement and restores normal figure lines for the mastectomy patient, will also be shown.

E. R. SQUIBB & SONS—BOOTH 69

Presenting LIAFON (Squibb Desiccated Liver, Ferrous Sulfate Exsiccated, Ascorbic Acid and Folic Acid) and Crysticillin, the new procaine penicillin G for aqueous injection.

SWIFT & COMPANY—BOOTH 29

New **all-meat** baby foods, Swift's Meats for Babies (Strained) for very young babies, and Swift's Meats for Juniors (Diced) for older children, are being exhibited by Swift & Company. These high protein, body-building foods are available in six varieties—beef, lamb, veal, pork, heart, and liver. These products are also gaining rapid acceptance for adult special diets. Representatives at the Swift & Company booth will be pleased to have you taste and examine these new products and to supply you with informative literature.

THE UPJOHN COMPANY—BOOTH 37

"Adrenal Cortex and Resistance" is the theme of the Upjohn exhibit. The central panel symbolizes that man's resistance to stress is being increased by science. The other panels show the effect on the adrenals of various stresses—infection, exercise, surgery and anoxia. The final panel shows the relative potency of adrenal cortex sterile solution and lipoadrenal cortex sterile solution.

U. S. VITAMIN CORPORATION
Casimir Funk Laboratories, Inc. (Affiliate)
BOOTH 53

Enlarged color photographs of common oral lesions of nutritional deficiencies, including glossitis, cheilosis, gingivitis and others . . . as well as improvement following administration of complete vitamin therapy. Also, complimentary copies of illustrated brochure, "Diagnosing Vitamin Deficiencies," "Vitamin Manual for Physicians," and other educational literature.

THE WARREN-TEED PRODUCTS COMPANY—BOOTH 35

The Warren-Teed Products Company is featuring their council-accepted items. Courteous professional service representatives will be pleased to answer any questions and discuss Warren-Teed preparations with interested physicians. Mr. D. R. Griffith will be in charge of the exhibit, and will be assisted by Mr. Wayman Byers, Mr. R. L. Sayre, and Mr. B. L. Cripe.

WESTWOOD PHARMACAL CORPORATION—BOOTH 55

Presents WESTSAL, the newly developed and **only** salt substitute that tastes **exactly** like salt.

Now possible to prescribe low-salt diets for cardiac, hypertensive and pregnancy toxemia patients without sacrificing palatability of meals. WESTSAL contains no sodium and can be used in cooking, baking and on the table, without loss of flavor. There is no patient-resistance to food seasoned with WESTSAL.

Please stop at our booth for full particulars and a taste to convince you!

WHITE LABORATORIES, INC.—BOOTH 78

White's Dienestrol Tablets and Dienestrol Suspension (Council Accepted)—a new orally effective synthetic estrogen—is featured. Complete information and literature are available regarding the advantages of Dienestrol's high biologic activity, excellent patient-tolerance and economy.

Other products of White Laboratories, Inc., are on display and White's Medical Service Representatives in attendance will be pleased to supply any further information requested.

THE WHITE-HAINES OPTICAL COMPANY—BOOTH 90

The Bausch & Lomb Hydraulic Refracting Unit, the Greens Refractor and the Poser Slit Lamp will be featured in the way of equipment.

Also on display will be the Copeland Streak Retinoscope, the Allen Gonioscopic Contact Prism and hand diagnostic equipment.

A complete line of frames and mountings, featuring Flexmont, Balgrip, Baylok, and metal, ornamented zylonite will also be on display.

The most complete lens line, including the new White-Haines Korectal, in both bifocal and single vision, will be shown.

The booth will be in charge of Don Rowles, Jack Gale and Tom Johnston.

WINTHROP-STEARNS, INC.—BOOTH 15

WINTHROP-STEARNS, INC., New York, extends a cordial invitation to visit its booth (No. 15), where representatives will be on hand to discuss the latest pharmaceutical preparations made by this firm. Featured will be Isuprel, new, more efficient and convenient bronchodilator—tablets for sublingual use, solution for inhalation; Neo-Synephrine, well-tolerated, prolonged decongestive; and Tricreamalate, creamalin (aluminum hydroxide) plus magnesium trisilicate.

WYETH, INCORPORATED—BOOTH 71

The Wyeth booth will feature an old friend and a new one. Propion^{R} Gel (Propionate Compound Jelly) is the new treatment for mycotic vulvo-vaginitis. It is highly effective, practical, safe, nonmessy. Petrogalar^{R} (Aqueous Suspension of Mineral Oil) has long been, and still is, standard treatment for constipation. There are five types to meet individual needs—plain, with phenolphthalein, with milk of magnesia, with cascara, and unsweetened.

The representatives in attendance will be glad to answer questions on these and other Wyeth specialties, and will have an ample supply of samples and literature for distribution.



CAMP

ANATOMICAL SUPPORTS for NEPHROPTOSIS

Together with treatment for any existing infection of the urinary tract, Camp Supports have proven valuable adjuncts in the relief of symptoms in many cases.

Camp-trained fitters have been instructed to consult the physician as to the position required for the fitting, if reclining or partial Trendelenburg. In the event that the physician desires the use of a pad, the fitter has been instructed to obtain information as to the type of pad to be used and to ask the doctor to mark on the garment or blue pencil upon the patient the exact location of the pad.

Advantages of Camp Supports in Conditions of Nephroptosis:

1. The "lifting" power of Camp Supports is from below upward and backward.
2. Camp Supports are an aid in improving the faulty posture that sometimes accompanies renal mobility.
3. Camp Supports are easily and quickly adjusted.
4. Camp Supports stay down on the body by reason of the foundation laid about the pelvis.
5. Camp Supports are comfortable.
6. Camp Supports are economically priced.

Camp fitters ask patients to return to their physicians for approval of the fitting.

S. H. CAMP AND COMPANY • JACKSON, MICHIGAN

World's Largest Manufacturers of Scientific Supports

Offices in New York • Chicago • Windsor, Ontario • London, England

News Notes

Dr. Arthur H. Girod, of Decatur, has opened an office in connection with his home for the practice of medicine.

Formerly of Harlan, Kentucky, Dr. Robert B. Nolan has located in English for the practice of medicine. Dr. Nolan, recently discharged as captain in the Army, is a graduate of the University of Louisville.

Dr. James M. Hicks has resigned as city health officer of Warsaw and has closed his office in order to leave for Chicago to take postgraduate work in surgery.

As a part of the expanding research program of the Indiana University School of Medicine, research seeking perfection of new surgical technics with special regard to the heart, is being started at the Medical Center. Dr. L. W. Freeman has been appointed director of surgical research, and was associated with Dr. Harris B. Shumacker, Jr., now professor and chairman of the department of surgery at the Medical Center, in a similar capacity at Yale University, where part of their present investigation was started. Dr. Joseph C. Finneran, of North Andover, Massachusetts, was recently granted a fellowship in surgery and will work with Dr. Freeman.

Dr. E. F. Kratzer, who practiced medicine at Waupecong for many years, has retired and has moved to Kokomo.

Upon discharge from the Army Medical Corps, Dr. Kenneth M. Lehman, formerly of Goshen, chose Topeka as a location and has opened an office there for the practice of medicine.

Dr. James C. Miller has opened an office in Greensburg for the general practice of medicine and surgery. Dr. Miller is a graduate of the Indiana University School of Medicine and served his internship at St. Joseph's Hospital, in South Bend.

A former Crown Point physician, Dr. C. R. Pettibone, who retired two years ago and moved to Florida, has accepted a position as resident physician at Michigan State College, East Lansing, Michigan. He assumed his duties there September fifteenth.

Dr. James R. Fant, formerly of Indianapolis, has moved to Milwaukee, Wisconsin, where he plans to practice general surgery.

Drs. Robert M. Seibel and Kenneth D. Schneider began their medical practice at Nashville and Morgantown on July fourteenth.

Dr. Daniel M. Hare has returned to Evansville, to be associated with Dr. Robert R. Acre. Doctor Hare has just completed a twenty-six month residency in urology at Parkland Hospital in Dallas, Texas. A graduate of Indiana University School of Medicine in 1940, he interned at Wayne County General Hospital, in Eloise, Michigan, then served a year's residency in surgical pathology at Indiana University Medical Center, followed by another year's residency in surgery. Doctor Hare entered the Army Air Forces Medical Corps in September 1943, and served in North Africa and Italy. He was released from service in January 1946.

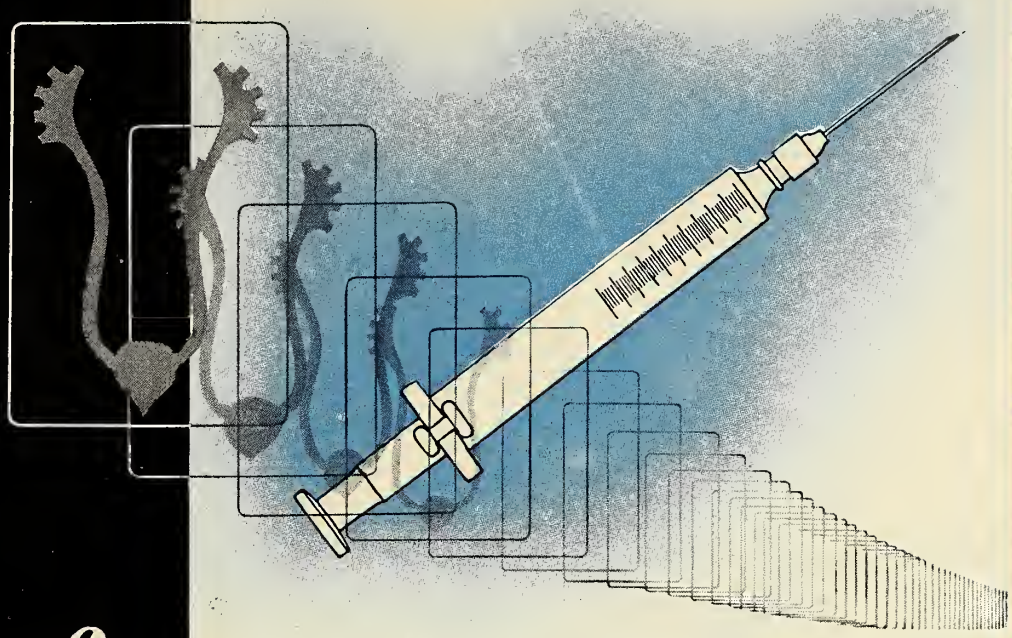
After completing a three-year Fellowship in radiology at the Mayo Clinic, in Rochester, Dr. George D. Davis is now at the Methodist Hospital, in Indianapolis. Before going to Mayo's, Doctor Davis had been in the Army for three years, prior to which he was in practice in internal medicine in Indianapolis.

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY

A number of changes in requirements and regulations were made at the annual meeting of the Board held in Washington, D.C., May 16 to May 22, 1948. New bulletins are now available for distribution upon application and give details of all new regulations. These relate both to candidates, and to hospitals conducting residency services for training.

The next scheduled examination (Part I), written examination and review of case histories, for all candidates will be held in various cities of the United States and Canada on Friday, February 4, 1949. Application may be made until November 1, 1948. Application forms and Bulletins are sent upon request made to American Board of Obstetrics and Gynecology, 1015 Highland Building, Pittsburgh 6, Pennsylvania.

(continued on page 1104



Safe for injection

The safety record of NEO-IOPAX* — Schering's brand of sodium iodomethamate for intravenous urography — is noteworthy: more than fifteen years of effective urinary tract visualization *without a single fatality* reported in the literature. The relative safety of

NEO-IOPAX®

(*disodium N-methyl-3,5-diiodo-chelidamate*)

is due to its unique composition and stability, the meticulous care exercised in its preparation, the careful control of all manufacturing stages, and the rigorous inspection of the finished product. Each ampul of NEO-IOPAX is sterile and free from foreign particles.

NEO-IOPAX is available in 10, 20 and 30 cc. ampuls of 50% concentration and 10 and 20 cc. ampuls of 75% concentration. Packaged in boxes of 1, 5 and 20 ampuls.

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Schering

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IN CANADA, SCHERING CORPORATION LIMITED, MONTREAL

NEO-IOPAX

SCHERING

(continued from page 1102)

Dr. William C. Robertson has opened offices in Fort Wayne for the general practice of medicine and surgery after being discharged from the Army Medical Corps with the rank of captain.

The appointment of Dr. Alexander T. Ross, of Indianapolis, as chairman of the Department of Neurology and Surgery at the Indiana University School of Medicine has been announced. Doctor Ross, former assistant professor in the department for eight years, will succeed Dr. David A. Boyd, Jr., who resigned to become consultant in psychiatry at the Mayo Clinic. Doctor Ross will also fill his place as director of the Child Guidance Clinic, currently being expanded under sponsorship of the Indianapolis Junior League.

At the annual meeting of the **Indiana Roentgen Society** held on Sunday, May 2, 1948, the following officers were elected for 1948-1949: President, Arthur P. Echternacht, M.D., Crawfordsville; Vice-President, L. A. Malone, M.D., Terre Haute; Secretary-Treasurer, William M. Loehr, M.D., Indianapolis. Clifford C. Taylor, M.D., Indianapolis, became Chairman of the Society's Executive Committee.

Two physicians have recently opened offices for the practice of medicine in Huntingburg: Dr. Louis H. Blessinger and Dr. James M. Wagoner. Both are gradutes of Indiana University School of Medicine and veterans of World War II, having entered the Army in June 1943, and being released from service in June 1948. Doctor Blessinger interned at the Methodist Hospital in Indianapolis, and Doctor Wagoner served his internship at the City Hospital in Binghamton, New York.

UROLOGY AWARD

The American Urological Association offers an annual award of $1000 (first prize of $500, second prize $300 and third prize $200) for essays on the result of some clinical or laboratory research in urology. Competition shall be limited to urologists who have been in such specific practice for not more than five years and to residents in urology in recognized hospitals. The first prize essay will appear on the program of the forthcoming meeting of the American Urological Association, to be held at the Biltmore Hotel in Los Angeles, May 16-19, 1949.

For full particulars write the Secretary, Dr. Thomas D. Moore, 899 Madison Avenue, Memphis 3, Tennessee. Essays must be in his hands before February 15, 1949.

The 28th annual convention of the **National Society for Crippled Children & Adults, Inc.**, will be held at the La Salle Hotel, Chicago, November 15-17. Many outstanding speakers in the fields of medicine, health and education will be on hand to present facts on progress in work with the handicapped during the past year.

The convention will be attended by physicians, therapists, educators, workers with the handicapped and representatives of National Society's more than 2,000 state and local units throughout the United States, Canada, Alaska and Hawaii.

A scientific meeting of the **Indianapolis Obstetrical & Gynecological Society** will be held on October 13, 1948, at the Athenaeum, Indianapolis. There will be a social hour at 6:30 p.m., followed by dinner at 7:00 p.m. The program will consist of original papers which have been presented by the new members of the society. The price of the tickets will be $5.00 and they may be secured through the secretary's office, Dr. L. J. Clark, 420 Hume Mansur Bldg., Indianapolis.

Dr. Martin L. Harshman is now practicing otolaryngology in association with the Arnett Clinic group, LaFayette, having just completed two years' postgraduate training at Washington University and Barnes Hospital, St. Louis, Missouri. A graduate of Indiana University School of Medicine in 1939, Doctor Harshman spent four years in the Army Medical Corps in Station Hospitals in the S.W.P.A.

Dr. George S. Rader, formerly of Bloomington, has opened an office at 822 Hume Mansur Building, in Indianapolis, for the practice of psychiatry. Doctor Rader is a graduate of Indiana University School of Medicine, in 1938. He interned at Indianapolis General Hospital for two years, and served a residency in psychiatry at Central State Hospital in Indianapolis for one year. He entered the service with the U. S. Naval Medical Corps, and spent a year and a half's sea duty in the Pacific theater, following which he served as neuropsychiatrist in hospitals in Washington, D. C., and Fort Worth, Texas. Separated from service in August, 1946, Doctor Rader took a postgraduate course in neurology and psychiatry at the University of Pennsylvania Graduate School of Medicine. During the past year he was a Research Fellow at the Institute of the Pennsylvania Hospital, in Philadelphia, and an instructor of psychiatry at the University of Pennsylvania School of Medicine.

Dr. Hascall H. Muntz, a 1944 graduate of the Indiana University School of Medicine, was married on July eleventh to Miss Evelyn Gertz, of Kilgore, Texas. Doctor Muntz has established an office for the practice of internal medicine in Tyler, Texas.

(continued on page 1106)



most highly regarded

OFFER a child candy—and he eagerly accepts it. Offer a sick child Penicillin *Dulcet* Tablets—and he eagerly accepts these. The reason is simple: he thinks they are candy. Penicillin *Dulcet* Tablets look and taste like candy, even when chewed or used as troches. A special cinnamon-flavored sugar base effectively covers the bitterness of the penicillin . . . 50,000 units of crystalline penicillin G potassium, which each tablet contains along with 0.25 Gm. calcium carbonate as a buffer. Penicillin *Dulcet* Tablets are a most practical form of oral penicillin for children, and also for those adults who dislike ordinary tablet forms. On your next prescription consider the sound therapy, the ease of administration, the ready acceptance —*then* specify Penicillin *Dulcet* Tablets, available in bottles of 12 at pharmacies everywhere.

ABBOTT LABORATORIES, North Chicago, Illinois.

SPECIFY

Dulcet® Penicillin

Potassium Tablets (buffered)

®(Medicated Sugar Tablets, Abbott)

(continued from page 1104)

SURGEON GENERAL EXTENDS TRAINING PROGRAM LIMIT

The Army Medical Corps has extended until November 1 its time limit for medical school graduates to apply for commissions under the Civilian Resident and the Civilian Intern Training Program.

Widespread interest in the program necessitated the decision by Major General Raymond W. Bliss, Surgeon General of the Army, to extend the time limit from July 1.

Under the program, selected individuals serve out their internships and residencies in civilian hospitals of their choice—interns as first lieutenants of the Medical Corps Reserve and residents as first lieutenants in the Regular Army Medical Corps. Both receive full pay and allowances of their rank, plus $100 a month professional volunteer bonus. Both complete their training just as they would as civilians.

Upon completion of their year's training, interns must apply for regular commissions and may qualify for residency training. Residents may continue their residency training upon concurrence of the hospital with a view to qualifying for specialty courses leading to certification by American Specialty Boards. Here the Graduate Training Program meets the Career Management Program under which medical officers are assured of continuation in their chosen specialties during Army service unless they choose administrative or staff careers.

Officers who participate in these programs are expected to serve a year of active duty for each year of training they receive.

The Graduate Training program was instituted by General Bliss with the advice and help of the American Medical Association, the Society of Consultants of World War II and other medical organizations, to help bring Army medicine into closer contact with civilian medicine. Superintendents and chiefs of professional services in great civilian teaching hospitals have indicated their wholehearted indorsement of the program. Many of these chiefs now serve also as consultants to the Surgeon General and make regular teaching visits to Army hospitals.

NATIONAL ADVISORY HEART COUNCIL

Federal Security Administrator Oscar R. Ewing has announced the appointment of 12 members of the National Advisory Heart Council, provided for in the National Heart Act of June 16, 1948. The appointments, made by Surgeon General Leonard A. Scheele of the Public Health Service, include outstanding national leaders in scientific research, medicine, education, and public affairs. The National Advisory Heart Council will serve as the chief consultative group in the attack on the Nation's major cause of death—diseases of the heart.

Those appointed to the Council, for terms varying from one to four years, were:

Mr. James S. Adams, of New York City; Trustee of the Indiana University Foundation; Director of the American Cancer Society.

Dr. C. A. Elvehjem, of Madison, Wisconsin; Dean of Graduate Schools, University of Wisconsin; member of the Food and Nutrition Board, National Research Council.

Mr. Maurice Goldblatt, of Chicago, Illinois; Chairman of the Board of Goldblatt Brothers, Inc.; President, University of Chicago Cancer Research Foundation; Board of Directors, American Heart Association.

Dr. Tinsley Harrison, of Dallas, Texas; Dean of Faculty and Professor of Internal Medicine, Southwestern Medical College; President, American Heart Association.

Dr. T. Duckett Jones, of New York City; Medical Director, Helen Hay Whitney Foundation; Chairman, Executive Committee, American Council on Rheumatic Fever.

Mrs. Albert D. Lasker, of New York City; cofounder of the Albert and Mary Lasker Foundation for educational and medical research; Trustee, Menninger Foundation.

Mr. E. B. MacNaughton, of Portland, Oregon; President of the Oregonian Publishing Company; Treasurer and Trustee of Good Samaritan Hospital, Portland.

Mr. Ernst Mahler, of Neenah, Wisconsin; Executive Vice President of Kimberly-Clark Corporation; Trustee, Lawrence College.

Dr. Irvine H. Page, of Cleveland, Ohio; Director of Research, Cleveland Clinic Foundation; past chairman Vascular Section, American Heart Association.

Dr. Burrell O. Raulston, of Los Angeles, California; Dean of the Medical School, University of Southern California.

Dr. Paul D. White, of Boston, Massachusetts; Physician and Chief of Cardiac Clinics and Laboratories, Massachusetts General Hospital; Chairman of committee on cardiovascular diseases, National Research Council.

Mr. Albert J. Wolf, New Orleans, Louisiana; Treasurer and Director, New Orleans Cotton Exchange; President of the Board of Trustees of Touro Infirmary, New Orleans.

Dr. White will serve as Executive Director of the National Advisory Heart Council. Ex-officio members of the Council are the Surgeons General of the Public Health Service, the Army and the Navy, and the Chief Medical Officer of the Veterans Administration.

The Council will serve as the official advisory body to the Public Health Service, in administering that law. The law requires that six of the members be outstanding experts in the study, diagnosis, and treatment of heart diseases. The other members may be chosen from the fields of general science, medicine, education, or public affairs.

Duties of the Council, under the National Heart Act, are to advise with the National Heart Institute in the development of research programs de-

(continued on page 1108)



The sooner the treatment of adrenal cortical insufficiency is initiated, the shorter may be the period of convalescence and the milder the patient's disabilities.

And the closer the therapy comes to replacing the multiple action of the whole cortical hormone, the more effective it can be.

Therein lies the therapeutic excellence of ADRENAL CORTEX EXTRACT (UPJOHN)—it is a specially extracted preparation from the whole gland containing the multiple active principles of the cortex. Whenever such typical symptoms of cortical insufficiency as lassitude, lowered muscular tone, markedly reduced resistance to infections, loss of weight, depression and mental apathy call for hormone replacement, ADRENAL CORTEX EXTRACT (UPJOHN) conveys in fullest possible measure the requisite cortical principles.

Upjohn
KALAMAZOO 95, MICHIGAN
fine pharmaceuticals
since 1886

Adrenal Cortex Extract (Upjohn)

Sterile Solution in 10 cc. rubber-capped vials for subcutaneous, intramuscular, and intravenous therapy.

(continued from page 1106)

signed to help in the attack on cardiovascular diseases; to review and make recommendations to the Surgeon General on applications from institutions or individuals for research and training grants; to make a world-wide collection of information on research in heart diseases; and to advise on the whole program of the National Heart Institute for controlling cardiovascular diseases.

The South Atlantic Association of Obstetricians and Gynecologists announces the establishment of "The Foundation Prize." Authors of papers on Obstetrical or Gynecological subjects desiring to compete for the prize may obtain information from Dr. E. D. Colvin, Secretary-Treasurer, 1259 Clifton Road, N. E., Atlanta, Georgia.

A.M.A. INTERIM MEETING

Registrations and hotel reservations are now being accepted for the second annual Interim Meeting of the American Medical Association at St. Louis, November 30 to noon, December 3, 1948.

On the eve of the Interim Meeting, Saturday, November 27, the first national Medical Public Relations Conference will be held under sponsorship of the A. M. A. at the Statler Hotel.

Planned to be especially valuable to the general practitioner, the Interim Session will offer lecture meetings, conducted by medical leaders on conditions most often seen in daily practice. Subjects to be discussed include diabetes, heart disease, cancer, poliomyelitis, obstetrics, pediatrics, dermatology, genito-urinary conditions, hypertension, anesthesia, tuberculosis, jaundice, laboratory diagnosis, x-ray diagnosis, and physical medicine as applied to the treatment of arthritis.

Diagnosis and treatment will be stressed in a wide variety of clinical conferences, which will be correlated with the lecture meetings. Leading practitioners from all sections of the nation will conduct these conferences.

Evening programs will feature distinguished speakers, the award of the general practitioner medal, and fun. Entertainment will be provided, free of charge to physicians and their guests of course, by stars of the amusement world.

A scientific exhibit with nearly 100 displays will show clinical and pathological material on subjects dealt with in the clinical conferences.

Approximately 115 leading firms will display technical exhibits, which will include new products, equipment, and medical publications. All exhibits will be open from Tuesday at 8:30 a.m. to Friday noon, November 30 to December 3.

Papers will be read at the General Scientific Meetings in the St. Louis Opera House from 9 to 10 a.m. and from 2 to 3 p.m. each day. At least six demonstration units are planned for each half day in the Scientific Exhibit from 10:30 a.m. to 12 noon, and from 3:30 p.m. to 5 p.m. Small rooms will be provided for these demonstrations and provision is being made so that physicians can take all the notes they wish in comfort.

Intermissions in the program will be from 10 to 10:30 a.m., 12 noon to 2 p.m., and 5 p.m. to 6 p.m. each day.

Officers and members of the House of Delegates will stay at the Statler Hotel. Those attending the Medical Public Relations Conference will stay at the Lennox Hotel.

A registration form which enables the physician to save time by securing a registration card in advance is appearing in *The Journal of the American Medical Association* every other week until the Interim Meeting. A convenient blank for making reservations at a number of St. Louis' best hotels, which are within easy walking distance of the St. Louis Auditorium, is also printed in THE JOURNAL.

All reservations must be cleared through the Chairman, Subcommittee on Hotels, American Medical Association, Hotel Reservation Bureau, 1420 Syndicate Trust Building, St. Louis 1, Mo., and must be received before November 9, 1948.

NOMINATIONS FOR SCHOLARS IN MEDICAL SCIENCE

Medical schools in the United States and Canada are invited by the John and Mary R. Markle Foundation to make nominations for the second group of Scholars in Medical Science on or before December 1, 1948. Each school, through the dean, may nominate one candidate. No nominations from individuals will be considered.

The program is designed to aid promising young men and women planning careers in academic medicine, who have not yet made their reputations. They should have completed the usual fellowship training in some area of science related to medicine and should hold, or expect to hold, in the academic year 1949-50 a full-time faculty appointment on the staff of a medical school.

Grants of $25,000, payable at the rate of $5,000 annually, will be made to the schools over a five-year period for the support of each scholar finally selected, his research, or both.

The John and Mary R. Markle Foundation was chartered in 1927 "to promote the advancement and diffusion of knowledge among the people of the United States and the general good of mankind." An initial endowment of $3,000,000, provided by the founder, John Markle, has increased under the terms of his will to approximately $16,000,000. In its early years the Foundation made grants for purely charitable purposes, but from 1935 to 1947 emphasis was on grants in aid of medical research.

A review of the field of medical science in 1946-47 indicated other more pressing opportunities for the Foundation and resulted in the decision to undertake the Scholars in Medical Science program. Because of this change in program, the Foundation is discontinuing grants in aid of medical research.

The number of scholars to be appointed in 1949 has not yet been determined. Sixteen were chosen in 1948. A new booklet describing the plan is available on request from the Foundation, 14 Wall Street, New York 5, N. Y.

(continued on page 1110)



the hospital's obstetrical supervisor will be glad to

Start with either and change from one to the other, to meet individual requirements.

Put your next bottle-fed infant on BAKER'S MODIFIED MILK...

Year after year, more and more doctors and hospitals are discovering the effectiveness of Baker's Modified Milk in most infant-feeding cases. Mothers, too, are pleased when the doctor prescribes Baker's, because Baker's requires no complicated feeding directions—just dilute with water.

Among the many reasons for these preferences are:

- Baker's Modified Milk is a complete infant food that closely conforms to human milk . . .
- . . . is well tolerated by both premature and full-term infants . . .
- . . . may be used either complemental to or entirely in place of human milk . . .
- . . . may be prescribed at any period—at birth or when mother's milk fails . . .
- . . . is helpful is correcting regurgitation, constipation, loose or too-frequent stools . . .
- . . . requires no changing of formula—as baby grows older, just increase the quantity of feeding . . .
- . . . reduces the possibility of error—only one simple operation: dilute with water, previously boiled . . .

Just leave instructions at the hospital. The obstetrical supervisor will be glad to put your next bottle-fed infant on Baker's Modified Milk.

• Baker's Modified Milk is made from tuberculin-tested cows' milk in which most of the fat has been replaced by animal and vegetable oils with the addition of lactose, dextrose, gelatin, iron ammonium citrate, vitamins A, B1 and D. Not less than 800 units of vitamin D per quart.

Complete information and samples gladly sent to physicians on request

ACCEPTED COUNCIL ON FOODS AND NUTRITION AMERICAN MEDICAL ASSOCIATION

BAKER'S MODIFIED MILK

THE BAKER LABORATORIES, INC.
CLEVELAND, OHIO

DIVISION OFFICES: DENVER, LOS ANGELES, SAN FRANCISCO, SEATTLE, AND GREENSBORO, N. C.

(continued from page 1108)

THE UNIVERSITY OF MICHIGAN MEDICAL SCHOOL POSTGRADUATE COURSES

Application of the Basic Sciences to Clinical Medicine, January 3-29. This program will correlate the basic sciences with clinical medicine. Lectures will cover the phases of chemistry, physiology, bacteriology, pathology, and pharmacology which are directly applied in the practice of internal medicine as well as clinical medicine. Daily ward rounds in small groups will offer practical demonstrations with patients and emphasize problems in physical diagnosis. Clinical conferences with the pharmacologist, bacteriologist, and pathologist will further aid in the correlation.

Urology Conference, January 19-20. A two-day postgraduate program in urology and related sciences is being offered by the Postgraduate Department of the University of Michigan under sponsorship of the Detroit Urological Society. The lectures and clinics have been selected to interest the specialists in both practice and basic knowledge of urology. Registration will be open at 9:00 a.m., January 19, 1949, in the Rackham Building. A limited number of rooms have been made available at the Michigan Union.

Requests for information should be addressed to Howard H. Cummings, M.D., Chairman, Department of Postgraduate Medicine, University Hospital, Ann Arbor, Michigan.

34TH CLINICAL CONGRESS OF AMERICAN COLLEGE OF SURGEONS

Surgeons from thirty-two states and from two Canadian provinces, with one speaker from Stockholm, Sweden, are listed as participants on the program announced by Dr. Irvin Abell of Louisville, Chairman of the Board of Regents of the American College of Surgeons, for the thirty-fourth Clinical Congress which will be held in Los Angeles, with headquarters at the Biltmore Hotel, from October 18 to 22. Speakers, discussion leaders, and chairmen for the scientific sessions during the five days total 163, in addition to which the research work of some 250 surgeons and their assistants will be reported in person or by proxy at the eight sessions of the Forum on Fundamental Surgical Problems in which 111 separate research projects from 33 medical schools and 26 hospitals and other institutions are scheduled for presentation.

Dr. Clarence Crafoord is the speaker from Stockholm, Sweden, who will deliver the Third Martin Memorial Lecture at the Presidential Meeting on the first evening. His subject will be "Some Aspects of the Development of Intrathoracic Surgery." Dr. Crafoord is Professor of Surgery at the Karolinska Mediko Kirurgiska Institutet in Stockholm. The Annual Fracture Oration will be delivered on Wednesday evening by Dr. Henry C. Marble of Boston, whose subject will be "Colles' Fracture."

At the Presidential Meeting on the first evening, Dr. Dallas B. Phemister of Chicago will be inaugurated as President of the American College of Surgeons, to succeeed Dr. Arthur W. Allen of Boston. Dr. Howard A. Patterson of New York will succeed Dr. Thomas E. Jones of Cleveland as First Vice President, and Dr. Carl H. McCaskey of Indianapolis will succeed Dr. Gordon B. New of Rochester, Minnesota, as Second Vice President. Dr. Paul B. Magnuson of Washington continues as Secretary.

At the annual Convocation on the final evening, October 22, more than 900 initiates are to be received into fellowship. The Fellowship Address, on the subject, "Hereditary Errors in Metabolism," will be delivered by Dr. George W. Beadle of Pasadena, Professor and Chairman, Department of Biology, California Institute of Technology.

THE ARMY CALLS FOR DOCTORS

Colonel Peter C. Bullard, Executive of the Indiana Military District, announces that the Army is calling to active duty on a volunteer basis a large number of medical officers to fill the present requirements for the Army and to meet the requirements for the expanded 18-division army. Fifteen hundred more medical officers are needed for the Army.

The appeal is to all doctors, and especially to those who received their training under the Government Training Program during the past emergency. It offers to the recent graduates of medical colleges an opportunity to continue their education in the Army Medical Corps, in so far as the exigencies of the service permit.

At this time the Army is offering opportunities for specialist and general training, and other inducements to those who meet the Army Medical Corps requirements.

In compensation for the higher cost of this Medical Education, Congress has voted that the medical officer who volunteers at this time be paid $100 a month more than is now paid to nonmedical officers in the same pay grade, or to a medical officer who may later be drafted.

This call is urgent and is open to all doctors, either in the Officers' Reserve Corps or those eligible for a commission.

For further information, contact the nearest office of the Organized Reserve Corps. These are found at Gary, South Bend, Fort Wayne, Lafayette, Kokomo, Anderson, Terre Haute, Indianapolis, Bloomington, Evansville, and Jeffersonville.

(continued on page 1112)



Throughout the formative years . . .

From birth to at least the age of 14 years, investigators now agree children are susceptible to rickets, with scarcely diminished frequency.[1]

The critical periods of active skeletal growth are found in infancy and childhood, lasting through at least the years just preceding puberty.[2]

Throughout these formative years patient cooperation assuring an adequate vitamin D intake is readily obtained by the use of

DRISDOL® in propylene glycol
milk diffusible vitamin D preparation

WINTHROP-STEARNS

ODORLESS . . .TASTELESS . . . ECONOMICAL
Average dose for infants 2 drops,
for children 4 to 6 drops, in milk.

DRISDOL, trademark reg. U. S. & Canada
CARTOSE, trademark reg. U. S. & Canada

Winthrop-Stearns INC.
NEW YORK 13, N. Y. WINDSOR, ONT.

SPECIFICALLY DESIGNED FOR INFANT FEEDING
LESS FERMENTATION
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CARTOSE®
MIXED CARBOHYDRATES
IN EASY-TO-USE LIQUID FORM
Compatible with all milk formulas
Bottles of 16 fl. oz. Write for Formula Blanks

1. Follis, R. H., Jackson, D., Eliot, M. M., and Park, E. A.: *Am. Jour. Dis. Child.*, 66:1, July, 1943.
2. Stearns, G.: *Jour. Lancet*, 63:344, Nov., 1943.

ASSOCIATION SEEKS DIABETES DETECTION

The American Diabetes Association has undertaken a campaign to promote earlier diagnosis and better treatment of diabetes. It seeks the cooperation of every physician and in particular it invites the participation of those in general practice.

Diabetes is more common than previously suspected. Surveys indicate that there are more than one million recognized cases in the United States. There is reason to believe that there are one million additional cases in which diabetes is present but not yet diagnosed. For every four known cases one can expect to find at least three more new cases. Diabetes can be treated with a high degree of success but when neglected or only half treated it can lead to serious effects directly or through its complications. In the mild, early cases treatment can be easy, simple and yet effective. More attention to these cases is vitally important.

To discover the asymptomatic cases of diabetes the American Diabetes Association recommends a two-fold policy: (1) a urine test for everyone every year and (2) a blood sugar test to follow every positive urine test. The U. S. Public Health Service has introduced a screening test which will show a high blood sugar, although not the exact level. It is expected that this test will soon become available everywhere. It will be particularly valuable in communities where it is difficult to secure ordinary blood sugar determinations.

To help the general practicing physician treat the diabetic the American Diabetes Association has sponsored "The Handbook of Diabetes"—a pamphlet presenting simple and concise direct recommendations in regard to the diagnosis and treatment of diabetes. Through the *ADA Forecast*, a magazine for the public, published every two months, the Association offers the diabetic patient, his family, and all persons interested in diabetes, both information and inspiration. Communications and inquiries concerning the American Diabetes Association or the ADA Forecast may be addressed to the Executive Office, 1 Nevins Street, Brooklyn 17, New York.

A Committee on Diabetes Detection has been appointed to direct the campaign for early diagnosis. It is headed by Dr. Howard F. Root. Proceeding with the approval of organized medicine in local and national societies, its efforts will lead to the celebration of a "Diabetes Detection Week," December 6 to 12. This is planned not as a final goal but as the inauguration of a continuing effort to master the clinical problem of diabetes in this country.

The diagnosis of diabetes does not require a specialist or any specialized technic. The American Diabetes Association urges people to consult the family doctor for annual urinalysis and also urges those who have known diabetes to maintain close contact with the family doctor for guidance of treatment. In the long run the concerted efforts of the general practitioners throughout the country will contribute most to the early diagnosis and successful treatment of the multitude of diabetics.

—*General Practice News.*

Deaths

Richard Franklin King, M.D., aged ninety-three, died at his home on September twelfth. He was still in practice. Doctor King was a graduate of the Central College of Physicians and Surgeons, Indianapolis, in 1881.

Hollace Rector Royster, M.D., of Frankfort, died August sixth at the age of fifty-nine. In 1917 Doctor Royster graduated from the University of Illinois College of Medicine, in Chicago. He was a member of the Clinton County Medical Society, the Indiana State Medical Association and the American Medical Association.

Wallace W. Wheat, of Roseville, aged seventy-seven, died August thirty-first. He was a graduate of the Eclectic Medical College, of Cincinnati, in 1899.

Fred Braginton, M.D., of Hammond, died September second at the age of eighty-six. He graduated from the Loyola University School of Medicine, in Chicago, in 1919. He had practiced in Hammond for fifteen years, retiring in 1946 because of ill health. Doctor Braginton was an honorary member of the Marion County Medical Society and the Indiana State Medical Association and was a Fellow of the American Medical Association.

C. F. Rendel, M.D., of Mexico, died September first at his home. He was seventy-three years of age. Doctor Rendel graduated from the Medical College of Indiana, Indianapolis, in 1905, and had practiced since that time in Mexico. He was a member of the Miami County Medical Society, the Indiana State Medical Association and the American Medical Association.



WHEN *Anorexia* POSES SPECIAL PROBLEMS

Periods of anorexia following infectious disease and surgery can readily produce a series of consequences detrimental to the patient: (a) curtailed food consumption, (b) further deterioration of the nutritional state, and (c) impeded recovery.

When anorexia occurs, activation of food interest becomes a first consideration for rapid convalescence. Highly nutritious food which is at the same time tasteful, stimulative to the appetite, and easily digestible, thus possesses both a dietary and a therapeutic worth.

In convalescence when appetite lags, the delightfully tasteful food drink made from Ovaltine and milk has particular usefulness for inciting food interest. It gives the patient a threefold combination of important dietary values: worth-while amounts of virtually all essential nutrients, easy digestibility, and appetizing tastefulness. Three glassfuls of Ovaltine daily can convert even a dietetically poor to fair food intake to full nutritional adequacy.

THE WANDER COMPANY, 360 N. MICHIGAN AVE., CHICAGO 1, ILL.



Ovaltine

Three servings daily of Ovaltine, each made of ½ oz. of Ovaltine and 8 oz. of whole milk,* provide:

CALORIES	669	VITAMIN A	3000 I.U.
PROTEIN	32.1 Gm.	VITAMIN B_1	1.16 mg.
FAT	31.5 Gm.	RIBOFLAVIN	2.00 mg.
CARBOHYDRATE	64.8 Gm.	NIACIN	6.8 mg.
CALCIUM	1.12 Gm.	VITAMIN C	30.0 mg.
PHOSPHORUS	0.94 Gm.	VITAMIN D	417 I.U.
IRON	12.0 mg.	COPPER	0.50 mg.

*Based on average reparted values for milk.

Society Reports

INDIANA STATE MEDICAL ASSOCIATION

EXECUTIVE COMMITTEE

August 22, 1948.

Roll call showed the following present: C. H. McCaskey, M.D., chairman; Cleon A. Nafe, M.D.; A. P. Hauss, M.D.; Alfred Ellison, M.D.

Guests: A. F. Weyerbacher, M.D., treasurer; Frank B. Ramsey, M.D., associate editor of THE JOURNAL; Albert Stump, attorney; John D. VanNuys, M.D., dean, I.U. School of Medicine; Charles E. Gillespie, M.D., and Ray E. Smith, executive secretary.

Membership Report

Number of members August 21, 1948	3,622*
Number of members August 21, 1947	3,556
Gain over last year	66
Number of members December 31, 1947	3,618

* Includes 55 in military service (gratis)
178 honorary members

Treasurer's Office

Pension trust plan. The treasurer submitted a suggested pension trust plan for headquarters office employees. No action was taken pending study of the plan by the committee.

Legislative Matters

National

The executive secretary read an extract from The Kiplinger Washington Letter of July 3 which revealed that the Immigration and Naturalization Service is able to supply refugee physicians, dentists, and nurses.

Local

A letter from the State Health Commissioner, quoting the law which prohibits release of vital statistical records was referred to the Council, upon motion of Doctors Hauss and Nafe.

Statements of receipts and expenditures for July of the association and THE JOURNAL were approved.

1948 Annual Session, Indianapolis, October 26, 27 and 28, 1948

Scientific program. The request of the Connecticut State Medical Society that a nurse be permitted to speak at the annual meeting upon "The School Study Report—Nursing for the Future" could not be granted because the 1948 program is filled. The secretary was directed to write Dr. T. P. Murdock, Meriden, Connecticut, to this effect.

General practitioner award. The treasurer reported that a painting by Georges LaChance had been selected as the award to the general practitioner of the year.

Organization Matters

The Indiana Cancer Society's request for mailing list of membership of the Indiana State Medical Association for use in sending educational literature to physicians was granted by consent.

Letter from the Bureau of Health Education of the A.M.A. inviting the association to participate in a new radio series entitled, "Doctors Today," was referred to the Committee on Public Relations.

The executive secretary reported on the Workshop in School and Community Health Education held at Indiana University, Bloomington, August 13-27, 1948.

The dean of Indiana University School of Medicine presented medical school policies relating to the collection of fees for outpatient services.

Medical Economics

Letter received from a Richmond physician in which the question, "Who should pay for medical services when a person is injured by a taxicab?" was asked. It was the opinion of the committee that the physician attending the injured person should look to the cab company for payment.

Veterans' Affairs

The executive secretary reported on two resolutions adopted by the Indiana American Legion at its recent convention: (1) requesting that five of the National Commander Scholarships be granted to medical students interested in the specialty of pediatrics, and (2) asking the Veterans' Administration to permit chiropractors to treat veterans who request their services.

The Journal

Report on Advertising:

Increase in August	$ 444.51
Decrease	30.00
Total increase, August	$ 414.51
Total increase for year	$1,755.44

Dr. Charles E. Gillespie, Seymour, appeared before the committee to give the details of an automobile insurance company for physicians which he proposes to organize. On motion of Doctors Nafe and Ellison the committee ruled that no article promoting any insurance company may be carried in THE JOURNAL except in paid advertising space.

The editorial secretary was granted permission to attend the annual A.M.A. Secretaries' and Editors' Conference in St. Louis on November 28 and 29, 1948.

By common consent the committee decided against using pictures of Indiana physicians who will speak on the annual session program in the convention issue of THE JOURNAL and the convention program.

(continued on page 1116)

EXPERIENCE IS THE BEST TEACHER...

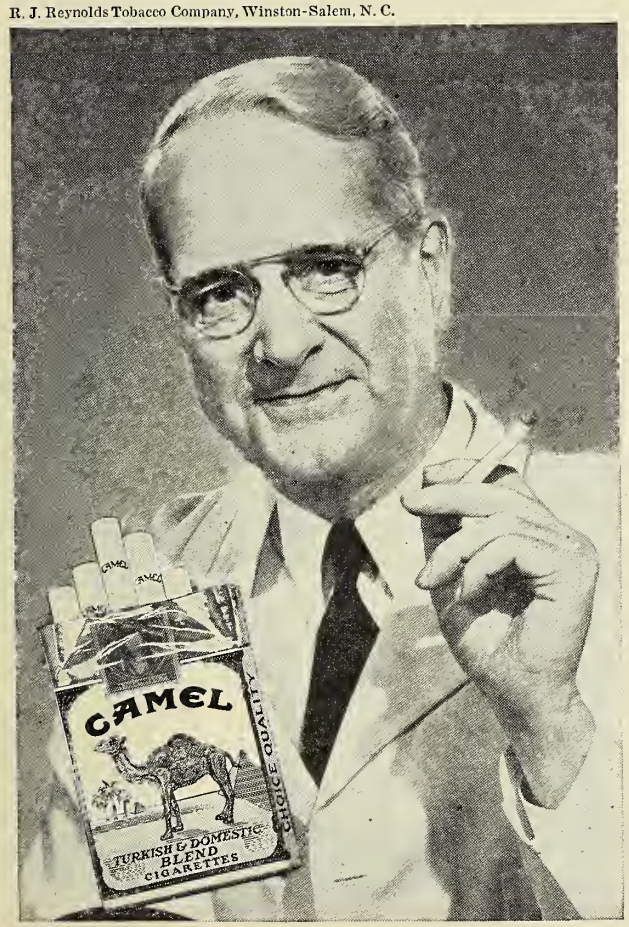


Carlos Finlay (1833-1915)

proved it in public health

Carlos Finlay, of Cuba, a bacteriologist, believed that yellow fever was transmitted by the stegomyia mosquito. His original experiments did not provide definite proof of his theory. However, he continued his search in co-operation with Walter Reed and the Yellow Fever Commission. The work of the Commission finally proved that infected mosquitoes could transmit the fever. The public health preventive measures derived from these experiments were so successful that the fever in Cuba was under control within a year.

R. J. Reynolds Tobacco Company, Winston-Salem, N. C.



Experience is the best teacher in cigarettes, too!

MILLIONS of smokers who have tried and compared many different brands of cigarettes have found that cool, mild, flavorful Camels suit them best

Try Camels on your "T-Zone"—T for Taste, T for Throat. See how your taste enjoys the rich, full flavor of Camel's choice, properly aged, and expertly blended tobaccos. See if your throat doesn't welcome Camel's cool, cool mildness.

Yes! Try Camels and see for yourself why, with thousands and thousands of smokers, Camels are the "choice of experience."

• • •

According to a Nationwide survey:

MORE DOCTORS SMOKE CAMELS

than any other cigarette

Three independent research organizations in a nationwide survey asked 113,597 doctors to name the cigarette they smoked. More doctors named Camel than any other brand.

(continued from page 1114)

The committee rejected a request of *The Clinical Proceedings of the Jewish Hospital*, Philadelphia, for exchange with THE JOURNAL.

There being no further business, the committee adjourned to meet again at 10 a. m., Sunday, September 26, 1948, at the Columbia Club.

COMMITTEE ON PUBLICITY

July 29, 1948.

Present: Homer G. Hamer, M.D., chairman; James O. Ritchey, M.D.; Marlow W. Manion, M.D.; Cleon A. Nafe, M.D., and Ray E. Smith, executive secretary.

Transcriptions of the new radio program, "The Story of Surgery," scheduled to begin over WFBM Saturday, August 7, 1948, and the radio series, "Medicine Serves America," which ended Saturday, July 31, 1948, were heard.

A sample transcription of "Doctor's Orders," offered by Radio Providence Productions, Providence 3, Rhode Island, was played. The committee voted to continue the radio programs procured from the Bureau of Health Education, American Medical Association, and not to purchase the "Doctor's Orders" series.

A news release for Indianapolis papers and press associations on date and place of the 1948 annual session was approved.

The following "Hints on Health" releases were approved:

Week of August 23, 1948—"Infant Deaths."
Week of August 30, 1948—"Lung Cancer."
Week of September 6, 1948—"Appendicitis."
Week of September 13, 1948—"Hearing Aids."
Week of September 20, 1948—"Accidental Deaths."
Week of September 27, 1948—"Childbirth."
Week of October 4, 1948—"Scarlet Fever."

LOCAL SOCIETY REPORTS

Elkhart County Medical Society met at the Empire Room of the Hotel Elkhart on September second. The guest speaker was Dr. A. Levinson, of Chicago, who spoke on meningitis, with particular attention to tubercular meningitis and its treatment with streptomycin. In addition there was a discussion of the proposed full-time Elkhart County Health Department and proposed hospital development plans. Forty-seven members and guests attended the meeting.

Howard County Medical Society met on September third at Kokomo. J. Paxton Powell, M.D., of Marion, spoke on "Traumatic Rupture of Intestines and Mesentery Due to Blunt Instrument Blows." Twenty-four members and guests were present at this meeting.

Orange County Medical Society met at the Gorge in French Lick on August third. Drs. J. F. Take, of French Lick, and S. F. Teaford, of Paoli, were made honorary members at the meeting. In conclusion, Dr. L. H. Allen, of Bedford, spoke on the use of spinal anesthetic in childbirth.

WOMAN'S AUXILIARY to the Indiana State Medical Association

President-elect—Mrs. William Morrison, Kokomo.

President-elect—Mrs. Truman Caylor, Bluffton.

Corresponding Secretary—Mrs. Charles Viney, Logansport.

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OUR GOAL

"Every Physician's Wife An Auxiliary Member"

INDIANA STATE CONVENTION

On behalf of the Woman's Auxiliary to the Indianapolis Medical Society I am most happy to invite and urge all Indiana doctors' wives and guests to attend the Indiana State Medical Convention in Indianapolis October 26-27-28. A varied and interesting program is being arranged for your entertainment.

Tuesday evening, October 26, we are invited to join our husbands at 8:30 P.M. at the Murat Temple for a vaudeville show which they are arranging.

Mrs. Ralph Gates, first lady of Indiana, has graciously invited us to tea at the Governor's Mansion Wednesday afternoon, October 27. This will provide an opportunity for you to meet your state officers and our gracious hostess, Mrs. Gates.

Thursday, October 28, at 1:00 P.M. there will be a luncheon-bridge at the Indianapolis Athletic Club. We expect to have many attractive table and door prizes, so be there for your share. Tickets will be on sale at the registration desk, so register promptly and get your tickets early.

Thursday evening we are again invited to join our husbands in the Egyptian Room at the Murat Temple for the final banquet of the session.

We are looking forward to meeting Mrs. Luther H. Kice, our national auxiliary president, at the luncheon and dinner on Thursday. This is our opportunity to show her what is meant by real "Hoosier Hospitality," so let's all turn out to welcome her.

(continued on page 1118)

MEDICAL CONVENTION ATTRACTION

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Matinee Friday, October 29th

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(continued from page 1116)

This sounds like a full program but there still will be time left for shopping and sight-seeing or just resting, as you prefer.

I might remind those of you who are on the board that Mrs. Morrison, your state president, is calling a board meeting for Wednesday, October 27, at 10:30 A.M. at the Indianapolis Athletic Club. Also, schools of instruction in Parliamentary Law, Organization, Public Relations, Legislation, and Radio, are being arranged for those interested in these various activities. Mrs. Morrison is extending a special invitation to members-at-large to attend the session on Organization. These classes are scheduled for Thursday at 11:30 A.M. at the Indianapolis Athletic Club.

It is with a great deal of pleasure that the women of Indianapolis extend this invitation to you, the "Hoosier Doctor's Wife," and we consider it a special privilege to serve you in any way that will make your visit pleasant and profitable.

MRS. BERT E. ELLIS, *President, Woman's Auxiliary to Indianapolis Medical Society.*

Books

TREATMENT IN GENERAL PRACTICE. By Harry Beckman, M.D., Professor of Pharmacology, Marquette University School of Medicine, Milwaukee. Sixth edition. 1129 pages. Cloth. Price $11.50. W. B. Saunders Co., Philadelphia, 1948.

"Treatment in General Practice" has had five revisions since first published in 1930. Dr. Beckman has endeavored to keep up with the pace of medicine. This book has been popular because it gives for each subject a short description of the disease, and the rest of the text is detailed treatment and medical management. This naturally appeals to the busy practitioner. The treatments given are the accepted ones in present-day use.

Sixty-six pages of bibliography and seventy-one pages of index are contained in this book. In this edition over one hundred topics have been completely revised and thirty-three new subjects have been added, including such conditions as eleven new uses for streptomycin, psychogenic rheumatism, creeping eruption, moniliasis, pulmonary aspergillosis, Reiter's syndrome, the therapeutic approach in Rh, and protein hydrolysate and vagotomy in peptic ulcer.

Pierce MacKenzie, M.D.

OCCUPATIONAL MEDICINE AND INDUSTRIAL HYGIENE. By Rutherford T. Johnstone, M.D., Consultant in Industrial Health; Lecturer at the University of California, Los Angeles. 604 pages, 117 illustrations (7 in color). Cloth. Price $10.00. The C. V. Mosby Company, St. Louis, 1948.

Compensation Insurance is now paid to most industrial employees for accidents and sickness, and if these conditions are properly diagnosed and well treated there will be no demand from labor for socialized medicine under governmental control. Accordingly, it behooves every doctor who comes in contact with any occupational hazard to be well informed on the subject and no better book can be found than this one. The chapter on Silicosis and Anthracosis should be required reading for every Indiana doctor because of our coal and stones industries.

New occupational diseases are arising with the use of new chemicals, solvents, plastics, D.D.T., et cetera, and this book supplies the chemical and metallurgical information which the doctor now needs in order to evaluate bizarre symptoms never before encountered. The most captivating chapter is the story of Ramazzini, the patron saint of industrial medicine who was born in Capri in 1633. The entire volume reveals how industrial medicine can be practiced on a high scientific plane instead of being a sordid contract practice of finger-wrapping.

Charles N. Combs, M.D.

HERNIA. By Leigh F. Watson, M.D., Los Angeles. Certified by the International Board of Surgery; formerly Associate in Surgery, Rush Medical College, Chicago. Third edition, enlarged and revised 732 pages, with 323 illustrations. Cloth. Price $13.50. The C. V. Mosby Co., St. Louis, 1948.

Outstanding features of HERNIA are the profuse and excellent illustrations done by W. C. Shepard, Miss Helen Lorraine and Mr. Ralph Sweet.

This book covers hernia in all its manifestations and gives the currently accepted operations and treatments. In this thoroughly revised edition obsolete material and much historical material have been deleted to make room for new material. New chapters have been added on complications of hernia, internal supravesial hernia, epigastric hernia, hernia into the broad ligament, industrial hernia, and recurrent inguinal hernia.

Inguinal hernia is considered in detail as to anatomy, etiology and treatment. Emphasis is placed on the original Halsted operation for inguinal hernia using silk. The Cooper's ligament operation is described in detail. It apparently allows a lower percentage of recurrences than the Bassini. Babcock's technique, using 38 to 30 silver wire, is also described for the Cooper's ligament operation. Harrington's operation for diaphragmatic hernia is described. He advises crushing the phrenic nerve during the operation.

Observations are given regarding early rising, the type of suture material, embolism and thrombosis, and preoperative and postoperative treatment and anesthesia. Important material is given about hernias in infants and children.

The injection treatment of hernia is discussed. It is not advised for the average clinic patient. For frail and debilitated people, where hernia is incidental to more serious ailments, in patients at the extremes of life, and where any other method is refused, injection treatment may be helpful.

There is a well selected list of references at the end of each chapter. It is a very attractive book.

Pierce MacKenzie, M.D.



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12	Benjamin F. Pence, M.D., Columbia City	Karl M. Beierlein, M.D., Fort Wayne	
13	A. A. Thompson, M.D., Tyner	O. E. Wilson, M.D., Elkhart	South Bend, Nov. 10

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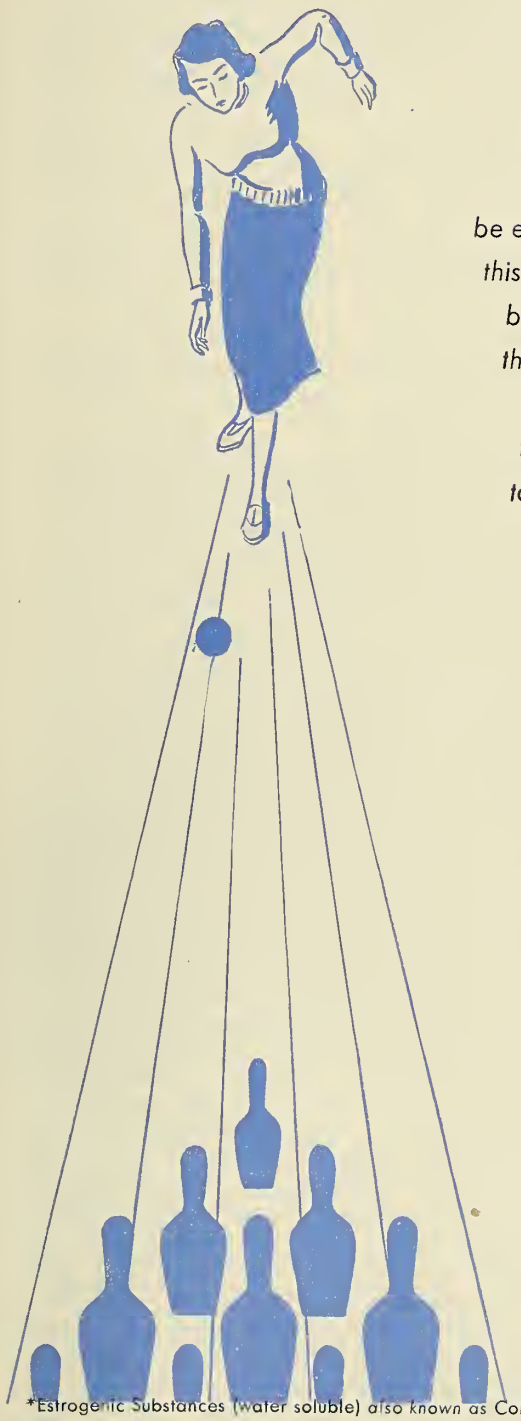
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Contributors are responsible for all statements made in their articles. The editor and editorial board members may not be in agreement with various views expressed by authors, but it is desired to allow authors as great latitude as possible. However, the right is reserved to reduce in length or reject any article.

Articles are accepted for publication only with the understanding that they are submitted for exclusive publication in THE JOURNAL of the Indiana State Medical Association. All communications regarding advertising and subscriptions should be sent to THE JOURNAL of the Indiana State Medical Association, 1017 Hume Mansur Building, Indianapolis 4, Indiana. Communications dealing with editorial matters should be sent to E. M. Shanklin, M.D., Editor, 5141 Hohman Avenue, Hammond, Indiana.

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(This committee also serves as the Committee on National Emergency Medical Service.)

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PRESIDENT'S ADDRESS*

CLEON A. NAFE, M.D.

INDIANAPOLIS

A YEAR has quickly passed since the last meeting of this association. It now becomes my privilege, as the 100th president, to give some accounting of the accomplishments of your society during the past year and to discuss some of the problems which we now face.

As we review these accomplishments, it may be timely to remind you that the direction of the affairs of this association is in the hands of the House of Delegates. Your officers serve you, and at times may seem to influence your actions, but this is a democratic organization and the policies are those outlined by your House of Delegates.

As you already know, the activities of our association are directed by the Council between meetings of the House of Delegates. Many details are decided by the Executive Committee which meets each month. Numerous other committees perform specific duties on behalf of the association. Our organization is rather complex. No one person can influence its course greatly, and that is probably a good thing. Progress is made slowly but soundly in such an organization.

Summaries of the activities of the officers and committees are recorded in THE JOURNAL, and are printed in the handbook. These summations represent a lot of work and I ask that each of you read them carefully. If you have differences of opinion, as members of this society you have the privilege and duty of appearing before the reference committee to which these reports are referred in order that a full expression of the members of the society may be conveyed on Thursday to the members of the House of Delegates for their determination of the policies of our association. The time and place of meeting of those reference committees are posted on the bulletin board.

To the other officers, the councilors, members of the Executive Committee, and the many members of the numerous committees, I wish to express my sincere appreciation for their fine cooperation in making my year as president a pleasant one. They have spent much time and effort on behalf of organized medicine, and they deserve your gratitude. They have served you well. Dr. Alfred Ellison, chairman of the Council, has had the united support of its members and has directed the affairs of that body capably and judiciously. Dr. Carl H. McCaskey has spent many hours of his valuable time, and has contributed much of his rich experience in directing the affairs of the Executive Committee. Dr. A. P. Hauss, your president-elect, has been of great assistance to me, and has given valuable counsel to many of the committees and other officers at all times.

I have been especially gratified to note the willingness with which many members of our association assumed the responsibilities that became their obligation. Many deserve special mention, but time will not permit me to do this.

HEADQUARTERS AND JOURNAL OFFICES

The task of reconditioning THE JOURNAL and headquarters offices, as recommended by Dr. Romberger last year, has been almost completed, at a moderate expense. If you will visit the head-

*Presented before the General Meeting of the Indiana State Medical Association, at Indianapolis, on October 27, 1948.

quarters offices, I am sure you will approve of the changes.

An ever-increasing amount of work has been placed on our hard-working executive secretary, Mr. Ray E. Smith. He has conducted the affairs of the headquarters office and the management of THE JOURNAL in an efficient and commendable manner. He has spent long hours, including nights and many Sundays, in discharging these responsibilities. His able assistants in both offices have served our association capably and courteously. The greater activities of our association make it advisable that some of the responsibilities of Mr. Smith be shared by an assistant. With our many committees desiring to do a better job, it is imperative that our society employ more full time help to implement their activities. Upon the recommendation of the Committees on Medical Education and Hospitals, Public Policy and Legislation, and Public Relations, the Council has approved the hiring of a Field Secretary to assist Mr. Smith and to extend our activities. This is in keeping with what has been done by many of the other state associations in an effort to meet the demand for better public relations, and to increase the scope of the activities of their organizations. I recommend that this action of the Council be approved by the House of Delegates.

This society is very fortunate in having as its attorney Mr. Albert Stump. I doubt if many of our members realize how much time and effort he devotes throughout the year in behalf of the medical profession, and I am sure that his many activities toward eliminating quackery, both in and out of the medical profession, is motivated by a real desire to serve the best interests of all of the people.

Serving as an officer of our association is a pleasant responsibility when we have as a part of the official family the fine type of people whom we employ.

Distribution of Physicians

Following the upheaval of World War II there resulted a concentration of physicians in larger centers with a corresponding decrease in the number of physicians in the smaller centers and less populated counties. This trend has been nation-wide. Peoples in rural areas and small communities have become very unhappy about this development. This has been of serious concern to the officers of your society and the proper solution is difficult.

However, all over the state there is evidence of a restoration of normal medical services to the communities which were lacking during the war. Most of the returned medical veterans have completed their residencies and are locating, for the most part, in larger centers. However, quite a few of the younger physicians are locating in some of the smaller communities. Our headquarters office has acted as a clearing house and has been helpful in finding locations for young physicians where communities have been especially desirous of obtaining their services. There are still many small communities asking for a new physician. I believe that we must inform our people that the pattern of medical care has changed, and that it is unreasonable to expect that there be a physician in the very sparsely settled communities. We must have them realize that modern transportation is such that almost any ill patient can be transported ten or even twenty miles where good equipment makes for better medical care. With good hospitals being constructed in most of our county seat towns and with good medical care available in the smaller cities, I believe that we can say honestly that medical care is available to all of our people at a reasonable distance although in some places a physician is not as convenient as the public desires.

County medical societies and individual physicians have become more conscious of their responsibility to see that good medical care is available to all of their people. Some medical societies have systematically made provisions so that physicians are available at all times to answer real emergencies when the patient's regular physician is unavailable. This has been done by telephone exchanges, or by using the hospital to transfer the calls in smaller communities.

Hospitals and Nurses

Improved economic conditions and the widespread sale of hospital insurance has greatly increased the demands for hospital care. Patients and physicians have been greatly inconvenienced by the lack of sufficient hospital beds. There is evidence all over the state of increasing hospital construction, especially in some of the moderate-sized cities. Costs are now excessive, but the medical profession must use greater influence to develop larger hospital capacities if the present needs are met.

The nation-wide shortage of nurses is one great factor in limiting the use of our present facilities. Our state association and many county medical societies have joined with other interested groups to increase the supply of nurses. There is evidence that these joint activities have produced some results. Larger nursing classes are enrolling this year in many of the nursing schools.

Our present medical care program has created many demands for nurses. The nursing shortage is a national problem because of these increasing demands. The nursing profession is conscious of this problem and needs the help of the medical profession in trying to solve it.

At the recent meeting of the House of Delegates of the A.M.A., Dr. Thomas P. Murdock, chairman of a committee studying the problem nationally, made some recommendations. Briefly, his committee suggested that there be three groups of nurses: nurse educators, requiring the three years of training; clinical nurses, two years; and prac-

tical nurses, one year. These recommendations should be studied by the officers of our association.

The Indiana State Nurses Association is proposing legislation at the next state General Assembly, asking that nurses be permitted to secure licenses at age 20 instead of 21. This will permit girls to enter nurses training immediately after high school graduation at 17, and prevent them from losing interest in this field, while they wait to be admitted. I recommend that our association aid the nurses in making this change and other minor changes that will improve the functioning of their board.

During the past year we have had several meetings with nurses, educators and others, for the purpose of setting up a program for training and licensing practical nurses in Indiana, as provided by previous legislation, as trained attendants. They propose to call them "practical nurses" in the proposed legislation. The requirements that are outlined by the State Board of Examination and Registration of Nurses for training of these groups should be such that the communities with small hospitals and good high school teaching facilities are able to train their own people sufficiently to qualify for licenses as practical nurses. As yet no community has been able to start such a project. I believe that such a state-wide program must be adopted if the nursing needs are met, and recommend that our association support the development of the practical nurse's training program.

However, just as there begins to be some stabilization and a solution of the medical care problems, there is sober discontent in the minds of many of our younger physicians because of the threat of another impending world conflict. When the increase of the armed forces as contemplated by the draft is completed, the armed forces will require 4,000 more physicians, according to present plans. Indiana will be expected to furnish approximately 100 of these.

At the request of the American Medical Association, the responsibility of selecting these physicians has been left to organized medicine. As yet very few physicians have enlisted voluntarily. Already a special draft of physicians, nurses, and dentists is being discussed. There is doubt as to whether such an action would be constitutional. It most certainly would not meet with the approval of physicians. Yet there is no doubt but that the American people desire that their armed forces have adequate medical care. The responsibility of furnishing this medical care now confronts us. This is not a pleasant obligation, but I know that our association will not shirk its part of the responsibility. How it should be done must be decided.

The tragic waste of good medical talent during World War II in the performance of many nonmedical duties has left its imprint upon the physicians serving in the last war. This has dampened the enthusiasm of many of the younger physicians for military service. Medical requirements of the armed forces and the utilization of physicians must be more carefully scrutinized by our profession, if our physicians are expected to volunteer willingly again on any large scale for military services.

Medical Education and Hospitals

As physicians we can be justly proud of our 70 Class A medical schools in the United States, and of our own state school, the Indiana University School of Medicine. The great advances in medical knowledge and the rapid improvements in the prevention and treatment of diseases make the education of a physician a difficult and expensive task. Large endowed schools are finding it almost impossible to continue because of the shrinkage of their income. There is considerable discussion of federal subsidizations of medical education. As physicians we are opposed to this venture, but without it state-supported medical schools must carry a greater responsibility of medical education than in the past. Those in charge of our medical school deserve the support of our association in their difficult responsibilities. Our medical schools have the responsibility not only of undergraduate, but also of postgraduate education. Our physicians should request and utilize more fully these postgraduate facilities of our medical school.

As physicians we have a great stake in medical education. Organized medicine is blamed for its failures but receives little credit for its accomplishments. We have been accused of limiting the supply of physicians by limiting the graduating classes. There has been considerable argument as to whether there are sufficient physicians being graduated to fulfill the needs for good medical care.

At present there are approximately 4,100 physicians in Indiana, with a population of 3,700,000, or one physician for each 900 people. There is general agreement that the distribution of physicians, especially since the changes brought about by World War II, is not ideal. Even if this were corrected, it is still debatable whether the number of physicians is adequate, since there are increasing fields of activity for which physicians' services are needed. To meet present demands, more general practitioners are needed, especially in smaller communities, and there are a considerable number of positions for physicians in state institutions which authorities cannot fill.

A recent statistical study made at my request by Dr. Serfling, Director of the Division of Public Health Statistics of the Indiana State Board of Health, indicates that during the next 15 years 88 physicians at age 25 will be needed each year to maintain the present number of physicians in Indiana. This study does not take into account the problem of migration, the greater scope of activity of physicians, or the expected increase in our population. These facts indicate that Indiana University School of Medicine must graduate more physicians,

if our state is going to educate as many physicians as are needed in Indiana.

There has been an increase in the demands for admission to our medical school, especially since the end of World War II. Dr. John Van Nuys, Dean of Indiana University Medical School, has recently announced that 150 freshman medical students have been accepted this year, which is greater than in any previous class. I recommend that our association endorse this decision and that we use our influence to see that the medical school is provided with sufficient funds to secure adequate teaching personnel and equipment to educate properly such a large group.

The first year of medical education at Bloomington has been notoriously difficult. The casualty rate during the first year seems entirely too high, since these students have been carefully selected from a large group and have respectable premedical records. In the minds of many, the medical profession is blamed for this, although they have little to say about it.

The high standards of medical education must be maintained, but such a high casualty rate seems unreasonable. In order that the first year of medical education may be less difficult and some of the difficult basic science classes may be mixed with some courses in clinical medicine, I urge that we continue our efforts in behalf of moving the first year of medical instruction to Indianapolis, as has been recommended by Dean Van Nuys and by his predecessor, Dr. W. D. Gatch.

There is a trend throughout the United States for medical schools to enter into the private practice of medicine in order to increase their diminished income. This is accomplished by hiring full time professional personnel and then collecting professional fees for such private patients as these physicians may treat. If universities can do this, hospitals can do the same thing. The medical profession has rightfully opposed such practices by hospitals. If medical schools can do this, there is no reason why the law schools shouldn't engage in the same type of activity in law. This is socialism and is not in the interest of good medical care. Such a plan encourages universities improperly to advertise and publicize their professors, because it is to their financial advantage to sell the services of these physicians. Soon the professor has little time to teach, but is interested only in his private practice. Such a plan destroys the harmonious relationship that should exist between the medical school and the physicians engaged in the private practice of medicine.

I therefore recommend that our association, in the interest of a good medical care and teaching program, constantly urge that our medical school and our hospitals refrain from engaging in the private practice of medicine. This is the legislative right and privilege only of physicians, without the intervention of a third party. This is not to be interpreted in such a way that our teaching institutions are deprived of sufficient patients for teaching purposes.

There are many other problems concerning medical education that deserve sober thought by the medical profession. Medical educators are concerned with the present lack of interest on the part of medical students in the general practice of medicine, and the trend toward overspecialization. Physicians in the private practice of medicine must exercise a major role in formulating the future pattern of the practice of medicine. Our association must continue a friendly liaison with those in charge of Indiana University School of Medicine, and with hospital administrations, in an attempt to find the proper solution to many of these problems.

Medical Public Relations

Methods of creating and maintaining good public relations for the medical profession have continued to be uppermost in the minds of medical leaders throughout the country. Many of the activities of our association have been carried out with that objective in view. Many county and district medical societies have devoted much time to a discussion of public relations problems. There seems to be more interest on the part of many physicians, especially some of the younger ones, in social, economic and political problems, and a desire on their part to make such contributions as they may in this field.

Although the threat of compulsory health insurance seems a little less dangerous at the present time, there must be no complacency on the part of the profession. On October 15, in Indianapolis, President Truman, in the desperate hope of reviving his waning chances of reelection, placed the problems of medical care of our people squarely in the national political arena, by advocating a system of compulsory federal health insurance. He spoke in a derogatory manner of the activities of the many physicians who opposed his compulsory health insurance plan as presented to the 80th Congress, by terming their activities a physicians' lobby. He utilized the unreliable statistics given by Social Security Administrator Oscar Ewing, in his recently proposed ten-year health plan, as a basis for urging the adoption of such legislation. Mr. Ewing made compulsory health insurance the major recommendation of his ten-year plan, to no one's surprise, even though the National Health Assembly, composed of many leaders in this field, and called to Washington by Mr. Truman, failed to make such a recommendation.

Mr. Truman stated that compulsory health insurance is not socialized medicine, which is deliberately misleading. It is exactly that. His estimated total of the lives lost because of lack of proper medical care likewise is erroneously high, when the method of determining these figures is evaluated. His statements would lead the unsuspecting listener to believe that medical care in the United

States is woefully inadequate, although any unbiased observer knows that it is the best in the civilized world. He stated that only 20 percent of our population could afford proper medical care, although he must know that more than 37,000,000 are covered by voluntary prepayment Blue Cross and Blue Shield plans and many more by private insurance medical care plans. Furthermore, he must know that practically every person in the United States has access to charity clinics and hospitals already established, with the full support of the medical profession, if they are unable to pay for such private care.

As long as we have such politically minded leaders, powerful in our federal government, ready to promise an idealistic federalized medical care plan, even though they know that such plans have failed elsewhere, and that the cost in hidden taxation is unbearably high, we will have this continued threat of unwarranted federal control of medical practice.

Physicians and their many friends have the obligation of vigorously opposing Mr. Truman in his efforts for reelection, as well as all those who subscribe to his views concerning compulsory health insurance, because we know that the result of such a system is a poorer grade of medical care for the people, at a much greater cost.

The only way to combat such a scheme of things is for us as physicians to demonstrate to our people that what they have now is better than any group of politicians can promise by any method of state medicine yet devised. In Indiana I believe that the great majority of our citizens are convinced that the medical profession is doing a good job and would not vote for a change. I believe this because the large majority of our elected officials and legislators who are responsive to the desires of the public have usually cast their votes in accordance with physician's viewpoints and in behalf of sound policies on medical problems. I believe this also because almost all of our newspapers in Indiana have supported the position taken by the medical profession in opposing many of the socialistic programs for medical care proposed by left wing political leaders.

This should not lead us to believe that we are doing the best job possible, but should encourage us to realize that our efforts to improve health standards and medical care are appreciated. No physician would contend that our answers to all medical care problems are perfect, yet we do know with certainty that by working with local communities to solve these problems, physicians can do a better job than can be done by even the most idealistic government directing these activities from Washington.

During the year the state association, through the council and various committees, has maintained a friendly liaison with Dr. Leroy Burney, State Health Commissioner. He has kept us informed of all major developments in the Department of Health, and has sought the advice and counsel of the association officers in an effort to maintain a sensible and efficient program for his department. Other professional health groups and most of the voluntary health agencies have worked in harmony with the state medical association in all state-wide projects. This friendly relationship should continue.

All public relations experts agree that the only sound basis for good medical public relations must rest on the excellent professional conduct of individual physicians. An unusual number of articles have appeared this year in widely circulated lay magazines severely criticizing the professional conduct of some members of the medical profession. The motivation for writing these stories is not known. They contain many exaggerations for dramatic effect, but even if they are partly true they damage the reputation of the medical profession. I feel certain that the great majority of our physicians in Indiana are not guilty of these infractions, and are extremely desirous that all improper professional conduct of individual physicians be completely eliminated. I therefore urge that every member of our association give serious thought to methods of detecting and eliminating all such sources of criticism of our profession in order that our association may take whatever action that is necessary to eradicate these evils.

Many problems confront the medical profession. Much of the leadership must come from the younger men. I urge that each of you make your County and State Societies and American Medical Association the medical organizations of your greatest interest, and that through these organizations you aid in solving these problems.

I also urge that every physician give more thought to the civic affairs of his community and to the problems of government. Physicians can contribute much to the thinking of our people beyond the problems that pertain to public health and medical care, because they stand out above the average citizen and their opinions are respected. Our world is in a terrible turmoil. Great leaders are needed to prevent world disaster. I sincerely believe that the medical profession should furnish more of that leadership.

I have spent considerable time as Chairman of the Executive Committee, and have now about completed my year as president of this association. This has enabled me to know better many of the physicians in this and surrounding states. I shall always cherish the many fine friends and acquaintances that I have acquired in the medical profession. I have spent considerable time in behalf of organized medicine. I have thoroughly enjoyed it, although I doubt that I have contributed very much. I am grateful and humbly proud that I have had the honor of serving in an official capacity such a fine organization of excellent physicians.

CLINICAL ASPECTS OF GASTRIC MALIGNANCY

GEORGE E. GATES, M.D.*

SOUTH BEND

THE purpose of this paper is to review those aspects of gastric malignancy which are pertinent to the examination and early diagnosis of these cases and their differentiation from benign gastric ulcers. As yet, there are no chemical or serological tests for gastric malignancy, and the differentiation must be on a clinical and radiological basis.

Every patient past 35 years of age, who has digestive complaints which are in the least suspicious of gastro-intestinal pathology, must be x-rayed at once. This does not mean a trial of medical treatment first; for, roughly, one-third of all gastric cancers respond initially to medical treatment, and will mislead the physician until the chance of surgical cure is past. However, if examination is complete and thorough at the first investigation, a correct diagnosis can usually be made, at least in 90 percent of cases. In the remainder, further study will raise this figure to nearly 100 percent.

The objection will be raised that it is impractical to x-ray all such patients, that the patients themselves will not submit to it. I do not believe this to be a valid objection. First, I believe it to be essential to the practice of good medicine, and that it reacts to the credit of the physician in the eyes of his patients. Many patients promptly seek another doctor if it is not done. Second, it is a protection for the reputation of the physicians, personally and as a group, to have recommended x-rays, even though in many cases they may be refused or deferred by the patient. Last, the expense involved, while it frequently acts as a deterrent, must not be allowed to do so in such an important situation.

It has been found that the average duration of symptoms before these patients visit the doctor is six months, but, by educational methods which are now being applied, this should be lessened. The average time after this first visit before a correct diagnosis is made has been found to be nearly another six months; and surely routine x-ray studies would practically eliminate this factor. However, even with this being accomplished, it is only proper to recognize that in a very appreciable percentage of cases the lesions will already have spread beyond the confines of the stomach, especially if the lesions do not originate near the pylorus or cardia, where they produce symptoms earlier.

Mass surveys of "well" people in these age groups might be thought to be a good method of detecting early cases even before symptoms manifest themselves; but series done to test this theory have been very disappointing. Pack found only three stomach cancers in over 2,000 cases, Wangensteen found two in 1,250, and Templeton found two in 2,400. This, admittedly, is impracticable, and we must return again to the general practitioner and ask him to do the case finding among the symptomatic individuals, but to do it earlier.

In reviewing the symptoms these cases may present, it is well to begin by repeating the statement that symptoms usually do not appear early in the course of the disease, and that "first" symptoms is a better name. Another important consideration is that they are rarely typical, and that, if they are typical, they are in a late type of case and probably inoperable. Again we are back to the thesis that all digestive complaints in a middle-aged or older individual should be investigated completely and at once, and that the investigation should include x-ray studies.

Perhaps the commonest story is that of vague epigastric discomfort or distress, associated with, or even followed by, disturbances of appetite and slight nausea. If the lesion is at the pylorus, these symptoms may be early vomiting, and if near the cardia, hiccoughing following eating. Eating frequently aggravates the distress, in contrast to the peptic ulcer syndrome, but about 30 percent of cases do show a rather typical ulcer reaction, with relief by eating; and the unwary physician who treats this large latter group by diet and antacids without x-ray studies will lose for these patients their chance of cure, in addition to placing his own reputation in the community, as a diagnostician, in considerable jeopardy.

It is well to point out that only 10 to 25 percent of these patients have a long history of digestive complaints over the years. Rather, in almost all of them the malignancy seems to be the initial dyspeptic episode, and therefore the onset of indigestion in a middle-aged or older individual with previously normal digestion is by far the most common picture. The patients who have had recurrent dyspeptic episodes for many years, suggestive of peptic ulcer or nervous dyspepsia, do not offer a very fertile field in which to search for gastric malignancy. This is particularly true of the patient with a previously proven duodenal ulcer and high acids in the gastric secretion; and it is a well recognized fact that having a duodenal ulcer seems to offer some protection against the future development of a gastric carcinoma.

With regard to the clinical differentiation of benign and malignant gastric ulcers, we come to a somewhat controversial and difficult field. Only general rules can be laid down which are of consider-

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able help in the individual cases; but each case must still be evaluated individually, and no one criterion is infallible.

The x-ray characteristics are very important. In the cases with demonstrable ulcer niche, the size of the niche is important; if over 3 cms., it is suspicious; if over 5 cms., it is usually malignant. Of course, smaller ones may also be malignant. Certain signs, such as the meniscus sign, and whether the defect is an addition or subtraction defect, are important to the radiologist.

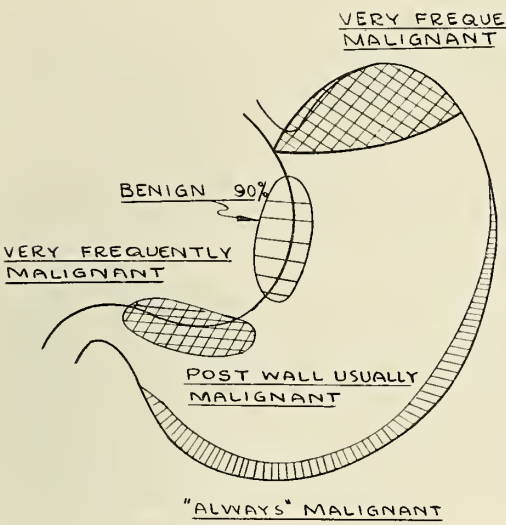
The location of the lesion is extremely helpful, and the accompanying charts, I and II, illustrate this factor.

The other x-ray data needed are: the fluoroscopic observation of the peristaltic waves in the region of the lesion; the character of the mucosal folds (which in benign ulcers radiate toward the ulcer like spokes of a wheel); and the degree of gastric retention at four hours (very large amounts usually mean benignancy, with duodenal ulcer and pyloric obstruction).

Gastroscopic observations[1] are of importance in doubtful cases, but are usually not available for routine use, and, in fact, probably not indicated for routine use.

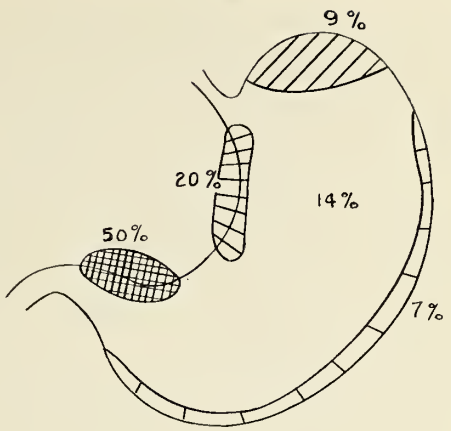
Gastric analysis is very important in these cases,[2] as roughly 75 percent of gastric malignancy shows

Chart I



% OF MALIGNANCY OF ULCERS IN VARIOUS LOCATIONS

Chart II



75 % BELOW THE INCISURA

SCHINDLER

LOCATION OF GASTRIC CANCER

low or absent free acid values. In the other 25 percent the acids will be normal or high, and of no help in differentiating them from benign ulcers. It is because of this group that some scoff at gastric analysis. It is a great help in most cases, however, for benign gastric ulcers almost never show low or absent acids. It should be noted that the above applies to fasting gastric analyses without histamine, et cetera, and that the achlorhydria frequently found in gastric cancer is seldom absolute when histamine is used, as it is in pernicious anemia.

Still another use of gastric analysis is for study of the sediment for cytology. Papanicolaou has developed this method and proved it of some use for his type of institution, but it is not yet practicable for general use.

Study of the gastric secretion for Boas-Oppler bacilli, et cetera, is not of much help, although they are present in late cases.

Occult blood tests of the stools are worth doing, and, if positive, are apt to be serially positive in gastric malignancy, but soon become negative when a benign ulcer is placed on medical management.

Last, but not least, the clinical history, the physical examination (including search for metastases), and the blood count, are of importance. Here it is important to mention that all cases of macrocytic anemia thought to be pernicious anemia should have stomach x-rays to rule out error in diagnosis.

Given an individual case, the above data will usually enable the physician to determine whether or not an individual gastric ulcer case is benign or malignant, and whether surgical or medical treatment is indicated.

Where reasonable doubt exists, a trial of medical

[1] Schindler, R., Early Diagnosis and Prognosis of Gastric Cancer. J.A.M.A., 115:1693. Nov. 16, 1940.

[2] Cooper, W. A. The Problem of Gastric Cancer. J.A.M.A,. 116:2125. May 10, 1941.

treatment, best done in the hospital, is indicated, though some believe all doubtful cases should be explored. In view of the difficulty of differentiation, even in the gross examination of the opened stomach, and the definite mortality of exploration, I do not believe that all cases should be explored. I have seen several resections of grossly suspicious ulcers turn out to be benign ulcers, and some of these patients die from the surgery. In addition, we must remember that surgery cures only a small percentage, as will be mentioned later. So I feel that three weeks difference, to allow for a therapeutic trial, is indicated much more often than is frequently seen in practice.

One objection is that some malignant ulcers will show an initial tendency to heal, thus misleading the physician, but this is not too frequent an occurrence.

A benign ulceration will almost invariably diminish in size very rapidly on hourly milk and antacid feedings given in the hospital, and may even be difficult to demonstrate by x-ray in two or three weeks. It should again be re-checked routinely in six weeks.

The types of cases in which therapeutic trial is indicated are: (1) Location on the lesser curvature and of the deeply penetrating type, with "addition" defect, and without achlorhydria. Most of these will be benign. (2) Lesions of the upper half of the lesser curvature (to within one inch of the cardia) are almost always (90 percent) benign, even though frequently of quite large size.

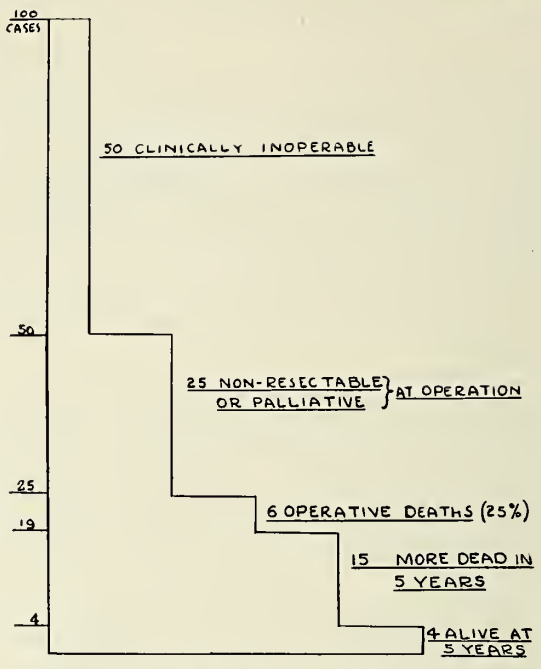
The following cases are more apt to be malignant, but probably warrant two weeks of therapeutic trial and re-examination: (1) Those with very large crater. (2) Those with irregular contour of the niche. (3) Those on the lower half of the lesser curvature, especially if on the posterior wall.

The ones warranting surgical exploration without therapeutic trial are: (1) Those cases with the meniscus sign. (2) Greater curvature lesions. (3) Subtraction defects associated with an ulcer. (4) Presence of an achlorhydria in any location.

Comparison of the above statements with Charts I and II will help one understand the reasoning behind these statements.

The story of what happens in most institutions in a large series of gastric carcinomas is well illustrated by Chart III, taken from Pack and compiled about 1938. Since that time there has been some improvement in the figures of the five-year cures, largely due to increased radicalness of the resections; but the figures still show only 6 to 8 percent of five-year cures in our leading institutions. However, if one takes the percentage of five-year cures only from those who actually underwent definitive gastric resection with "possibility" of cure, the percentage rises to a more hopeful figure, in fact, roughly comparable to the results in radical breast surgery.

FIGURE III



THE USUAL STORY IN GASTRIC CARCINOMA IN LARGE CITY CLINICS (FROM PACK)

Total gastric resection is coming to the fore as the possible operation of choice in the future for many cases.

Very little progress has been made experimentally in the study of gastric cancer, although Strong has recently been able to produce what he believes is gastric cancer in certain strains of mice by the use of methylcholanthrene subcutaneously; and the amazing thing about it is that the untreated descendents of these mice develop the same lesions.

This discussion can hardly end without a word about the question of whether benign, chronic gastric ulcers can become malignant. Several decades ago it was felt by some that the great majority of gastric cancers arose in this manner; but very rapidly it was found that only a small percentage, perhaps 5 percent, did so. It is becoming more and more evident that even this figure may be in error, and that perhaps, or probably, it is a great rarity for a benign ulcer to become cancerous in the stomach. In other words, if a gastric ulcer is malignant, it probably always was so from its beginning.

In summary, many important features of the study of gastric malignancy have been omitted or merely touched upon, because the purpose of this paper is merely to review some of the clinical aspects and findings which are important in early diagnosis of gastric ulcer and in the differentiation of benign and malignant cases, and in the treatment thereof.

NOVOCAIN INJECTION TREATMENT OF METATARSAL FRACTURES

CLAUDE OTTEN, M.D.

E. B. MUMFORD, M.D.

INDIANAPOLIS

FRACTURE of the shaft of the metatarsal bone is a not uncommon lesion in industry and the disability (time away from work) has usually been long. Many cases have as an end result some permanent impairment due to pain on weight-bearing. Until ten years ago our plan of treatment had been the orthodox one of reduction and immobilization by plaster of paris splints, with or without walking irons or heels. Our experience as to disability and end result was perhaps that of other surgeons. In 1939 our attention was called to a report of a series of cases of fractures of the metatarsal bones treated by early injection of novocain into the hematoma about the fracture line and the early resumption of weight-bearing without any splintage for immobilization of the fragments. The plan did not seem to be a rational one, nor logical, nor to follow the accepted dictum of fracture treatment. We were unable to have any physiological reasoning that might account for a simple novocain injection in the fracture line accelerating in any way the normal healing of the fracture or for the elimination of pain over a temporary and short period of time. But there was the record of a series of cases so treated and with reported good results.

About eight years ago a man 70 years of age was seen with a simple fracture of the second metatarsal bone, with about one-fourth displacement of the fragments. With the consent of the patient and of his employer, the fracture hematoma was injected with 2 percent novocain. There was no attempt to immobilize the fracture by either adhesive strapping or by plaster of paris. He was, however, given crutches but instructed to bear full weight. He returned the next day practically free of pain. On the third day he came to our office wearing a new pair of shoes, and returned to full work on the fourth day. He was not seen again for six weeks, during which time he had worked and the fracture had healed without excessive callus.

The experience with this one case led to our adopting the injection method as routine in our fractures of the metatarsals. A record of the cases so treated from 1939 to August, 1944, is not available, but from that date 57 cases have been studied and an analysis of the end results shows a disability average of 11.6 days in 35 cases injected with novocain, 47.3 days in 14 cases immobilized with plaster of paris, 32 days in 5 cases injected and immobilized with plaster of paris, and 22.6 days in 3 cases injected and strapped.

The fracture line is infiltrated with 10 cc. of 2 percent novocain and an attempt is made to obtain a normal anatomical reposition of the fragments. Although some lateral displacement is not objectionable it is essential that any plantar angulation be corrected. The patient is advised to use crutches but to have weight-bearing to the points of pain. Immobilization or splintage, with either adhesive strapping or with plaster of paris, is not used. He returns to work when the pain upon full weight-bearing is such that his work can be done.

INJECTION ALONE

Metatarsal	No. Cases	Total Disability	Average
1st	8	97 days	12.0 days
2nd	9	41 days	4.5 days
3rd	1	0 days	0.0 days
5th	5	55 days	11.0 days
1st and 2nd	2	63 days	31.5 days
1st and 4th	1	14 days	14.0 days
2nd and 3rd	2	0 days	0.0 days
2nd 3rd and 4th	3	94 days	34.0 days
3rd and 4th	1	25 days	25.0 days
4th and 5th	3	18 days	6.0 days
	35		11.6 days

CAST ALONE

Metatarsal	No. Cases	Total Disability	Average
1st	5	293 days	58.5 days
1st and 3rd	2	71 days	35.5 days
1st and 2nd	2	92 days	46.0 days
1st and 5th	1	29 days	29.0 days
1st 2nd and 3rd	1	57 days	57.0 days
3rd and 4th	1	42 days	42.0 days
3rd 4th and 5th	1	42 days	42.0 days
4th and 5th	1	45 days	45.0 days
	14		47.3 days

INJECTION AND CAST

Metatarsal	No. Cases	Total Disability	Average
1st	1	33 days	33.0 days
1st and 2nd	2	39 days	18.5 days
2nd and 3rd	1	83 days	83.0 days
3rd and 4th	1	5 days	5.0 days
	5		32.0 days

STRAPPING

Metatarsal	No. Cases	Total Disability	Average
1st	1	0 days	0.0 days
2nd	1	37 days	37.0 days
2nd and 4th	1	31 days	31.0 days
	3		22.6 days

No attempt will be made to explain the phenomenon of injection of a fresh fracture. One might consider the same breaking of the pain reflex which is seen following injection of a sprain of the ankle ligaments. Four cases of novocain injection into the fracture line of transverse process of the vertebra gave rather favorable results, the days of disability being four months, two weeks, one month and one week.

CONCLUSIONS

Early novocain injection into the hematoma at the fracture line in fractures of the metatarsal bones without immobilization and with early weight-bearing has been more satisfactory than the method which employs immobilization alone.

A few cases of fractures of the transverse processes of the vertebra have given the impression that the injection with novocain may be the treatment of choice.

WHAT IS THE BEST TREATMENT FOR EARLY SYPHILIS

Alexander M. Buchholz, M.D.*

WHITING

WHAT plan of treatment do you select for your patient with early syphilis? Certainly the choice is not as clear-cut as it was just a decade ago when we took the excellent recommendations of the Co-operative Clinical Group without hesitation and with the assurance that this was the best we could give our patient. Since 1939, however, there have been over fifty different proposed treatment schedules which employ variations in drugs, dosage, time interval of administration, and fever therapy. The very profusion of the therapeutic plans should suggest caution. Should we then use penicillin? If so, should it be 2,400,000 units? Perhaps 4,800,000 would be better. Why not penicillin in oil and wax? If so, what dosage, time interval, and should it be supplemented with other antiluetic drugs? Certainly our confusion is well justified and we may cast about for some concrete basis for our selection. It would be well, therefore, to review the objectives of treatment.

In early syphilis our main objective is to obtain complete obliteration of the syphilitic infection. A second objective is to control the infectiousness and thereby the spread of the disease. While these have long been recognized as primary objectives, a third should be the prevention of the patient lapsing from treatment. (In old treatment schedules treatment lapse was as high as 80 percent!) The first two objectives can be realized by laboratory and clinical studies. Laboratory studies in rabbits include: (1) prophylactic use of drugs, (2) the disappearance of the Treponemata from the lesion, (3) the healing time of such lesions, and (4) the prevention of relapse. If these experimental studies in rabbits indicate some degree of therapeutic efficacy, and if the toxicity is limited, drugs are usually given an experimental trial in human syphilis under controlled conditions where careful follow-ups may be done. In addition to these tests noted on rabbits, we now note in humans the effect of the drugs on serologic tests (rapidity with which the positive blood becomes negative), the incidence of abnormal spinal fluid findings in the early stages of syphilis during the time the experimental drug is given, and finally, the development or lack of development of the late manifestations of syphilis. With these comprehensive studies it can be seen that many years must elapse subsequent to the inauguration of a drug or treatment schedule before a final estimate can be made. With this in mind we may evaluate the current reports of new modalities in treatment.

We all have read and more or less accepted penicillin as the drug of choice in the treatment of early syphilis. Let us now look to its evolution since Mahoney[1] in 1943 first announced the successful treatment with penicillin of four patients with early syphilis. Here was an agent which was nontoxic, easily administered, effective, and did not require the services of a specialist. This seemed to be the realization of Ehrlich's dream of a drug which would sterilize and be safe. Mahoney employed 1,200,000 units of penicillin over a period of seven and a half days, but as this was used more widely the dose was found to be inadequate, and 2,400,000 is being used. Heller[2] showed that the latter dose used in secondary syphilis gave as high as 27 percent infectious relapse. This is a grave complication. Padget[3] states that in this event cure is three

[1] Mahoney, J. F., Arnold, R. C., Harris, A., Penicillin Treatment of Early Syphilis: a Preliminary Report. Ven. Dis. Inf., 24:607, 1941.

[2] Results of Rapid Treatment in Early Syphilis. J. of Ven. Dis. Inf., 27:217-228, Sept., 1946.

[3] Padget, J., Long Term Results of Treatment in Early Syphilis. J. Gon. & Ven. Dis., 24:692-731, 1940.

times less frequent than if it did not occur. In addition, neurosyphilis and other manifestations of progression were six times more frequent among those who had relapsed than among those who had not. This serves as an important deterrent to those who would be overenthusiastic about inadequately proven treatment plans for early syphilis. Eagle[4] in 1946 reported that mapharsen and penicillin were synergistic in their anti-luetic activity in experimental rabbit syphilis, so that new plans incorporate both penicillin and arsenic. Bismuth and penicillin have been shown to be more effective than penicillin alone. Now there is a report[2] of an eight-day schedule employing arsenoxide and bismuth with 600,000 units of penicillin, with failures in over 40 percent in secondary syphilis. Further caution may be extracted from Heller's[5] report by noting that sufficient time must elapse before drawing conclusions. At the end of eight months, 300,000 units of penicillin with 320 mg. of arsenoxide showed a relatively low percentage of failures. By the fifteenth month, however, this schedule had a retreated rate of over 30 percent. From this experience, it can be seen that the effectiveness of any method of treatment, as judged by the results during the first six months of follow-up, may not be borne out by its effectiveness after twelve or fifteen months of observation.

Romansky[6] has shown that 300,000 units of penicillin in beeswax and oil will maintain a therapeutic blood level for twenty-four hours. This is a most important advance for it not only removes the necessity for multiple daily injections but it makes it possible to treat the patient in the office. Thomas[7] has reported the use of 600,000 units of penicillin in beeswax and peanut oil daily for eight days. After six months follow-up he reports successful treatment in 93 percent of seronegative primary, and 86 percent of seropositive primary syphilis. However, 40 percent required retreatment. Schedules with penicillin in oil plus mapharsen and bismuth are in process of evaluation and may prove to be the most promising mode of therapy. However, further confusion has been added by the discovery of different fractions of penicillin called G, F, K, and X. K is eliminated very rapidly and is not suitable for the treatment of syphilis. The other fractions are now being tested individually and their therapeutic efficacy is being determined. Preliminary studies suggest that G and X are best.

How does the therapeutic effect of penicillin compare with other modes of treatment? The old two-year schedule gave 90.4 percent satisfactory results in early syphilis,[3] but it is to be remembered that 20 to 80 percent lapse from treatment under this prolonged schedule, in addition to the disadvantage of toxic reactions from arsenic. The five-day intensive treatment (by 1,200 mgm. of mapharsen within five days) gave the highest percentage of satisfactory results but resulted in mortality of one in 250 cases. There is a twenty-day schedule[2] which gave a 93 percent satisfactory result with a mortality of one-tenth of 1 percent and a 5 percent lapse from treatment. Of the ambulatory intensive arsenic treatment schedules, the Eagle Hogan method is perhaps the best, for it gives a 90 percent satisfactory result with relatively low toxicity. It consists of tri-weekly intravenous injections of mapharsen for eight weeks, and eight weekly injections of 0.2 gm. bismuth subsalicylate in oil given intramuscularly. The dosage of mapharsen may be determined as follows:[8]

Weight (in lbs.)	Dosage of Arsenoxide (in Mg.)
90	40
90-120	50
120-155	60
155-185	70
185	80

There is no doubt that the future for the eradication of syphilis is promising, and the relegation of this disease to the status smallpox now holds seems not too distant. There is no one who can say with certainty which is the best method of treatment in early syphilis. The effectiveness of penicillin has been proven but because of the numerous treatment schedules, the proper one will require years for correct evaluation. We may find that one fraction of penicillin given in oil and wax, combined with intensive arsenotherapy and bismuth, may be the answer. Certainly with Bal our fears of toxic reactions to the heavy metals are lessened. Perhaps the idea of removing the infectious patient from circulation and placing him in the hospital for a week or less to realize a cure is within the realm of possibility. In this manner we may realize the prime objectives of treatment:

1. The complete obliteration of the infection,
2. The control of infectiousness, and
3. The completion of treatment.

[4] Eagle, H., Magnuson, H. S., Fleischman, R., The Synergistic Action of Penicillin and Mapharsen in Treatment of Experimental Syphilis. J. of Ven. Dis. Inf., 27:3-9.

[5] Heller, J. R., Results of Rapid Treatment of Early Syphilis. J.A.M.A., Vol. 132, pp. 258-263, Oct. 5, 1946.

[6] Romansky, J. R., Rittman, G. E., Penicillin blood levels for 24 hours following a single intramuscular injection of calcium penicillin in beeswax and oil. N. Eng. J. Med., 233:577-582, 1945.

[7] Thomas, E. W., Landy. S., Cooper, C., Penicillin Treatment of Early Syphilis. J. of Ven. Dis. Inf., 28:19-23, Feb., 1947.

[8] Eagle, H., Hogan, R. B., An experimental evaluation of intensive methods for the treatment of early syphilis. Ven. Dis. Inf., 24:33, 1943.

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THE JOURNAL'S PLATFORM

1. **Preservation of American Medicine through voluntary service to the sick.**
2. **Advocating full-time county or district health officers, locally appointed.**
3. **Restoration and preservation of our natural waters and resources.**
4. **Maintain the present high standard of the Indiana University Medical Center, combining the full medical course in Indianapolis.**
5. **Elimination of diphtheria and smallpox through immunization and vaccination.**
6. **Support of the state-wide campaign against undulant fever.**

Editorials

A.M.A. INTERIM MEETING

THE second annual Interim Meeting of the American Medical Association will meet at St. Louis from Tuesday, November 30, to noon on Friday, December 3, this year.

The original interim session, held at Cleveland last year, was an outstanding success. Judging by plans and announcements, the coming meeting should exceed its predecessor in excellence. Both were particularly designed for the benefit of general practitioners. This is the meeting where the doctors meet in one scientific section, to learn more about everyday problems. There will be no specialty section meetings.

Lectures and clinical conferences will be conducted daily during morning and afternoon hours in the St. Louis Opera House. The essayists will stress diagnosis and treatment of conditions most commonly encountered in general medical practice.

Some of the evening hours have been reserved for distinguished speakers. The general practitioner medal will be awarded at one of the night meetings. In order that the four-day session will not be all seriousness and business, physicians and their guests will be entertained by headliners of the amusement world.

The scientific exhibit will consist of almost 100 displays of the material which will be discussed in the clinical conferences. Special demonstration units will function each morning and each afternoon in small rooms near the scientific exhibit. Physicians may attend the demonstrations from 10:30 a.m. to noon, and from 3:30 p.m. to 5 p.m., and will be accommodated so that they may make notes if they desire.

The technical exhibit will be attended by some 115 commercial firms, including equipment and

pharmaceutical manufacturers, and medical publishers. Both of the exhibits will be open during the entire session.

In addition to the principal program, other activities of the association are scheduled before and during the regular meeting. The House of Delegates will meet at the Statler Hotel.

On Saturday, November 27, the first national Medical Public Relations Conference will be conducted at the Statler. This conference will be attended by the chairmen and members of public relations committees and officers of state societies.

On Sunday and Monday, November 28 and 29, the A.M.A. will sponsor the Annual Conference of Secretaries and Editors. This meeting has been held in Chicago, previously, and will be in conjunction with the interim meeting for the first time.

On Tuesday night, November 30, the "Grass Roots Meeting," the Conference of County Society Secretaries, will meet under the chairmanship of Dr. A. M. Mitchell of Terre Haute, who has the honor of occupying the chair of this important assembly for the third time.

Now is the time to make sure of a hotel reservation in case you have not already done so. Convenient blanks for this purpose are carried in the *J.A.M.A.*

EVA JOANNA BUXTON

DOWN in Rockport, not long ago, there was held a real "civic" celebration, honoring a woman physician who had reached the age of 85. For more than fifty years she had ministered to the ailing of that community, so it was that some 150 local residents gathered in one of the local churches for a dinner honoring that event.

Her family had advised her that there would be a family dinner, held in the church building, since the home dining room would not take care of them all. Later, when she went to the dinner she found a veritable host of her friends and a table laden with only such provender as a country community knows how to provide.

Last year Doctor Buxton had completed fifty years of active practice, all in the community and, as the mistress of ceremonies remarked, "You know all about us; you have attended us all through various illnesses and you have long since become an integral part of Rockport and the neighboring community."

Doctor Buxton is a graduate of the old Northwestern University Woman's Medical School, one of the old-time schools, now long since closed, that was held in very high esteem in medical circles.

Such fetes as these are more than a monument to the one in whose honor they are held and it is a pleasure to record them in our annals. As a matter of fact, someone recently said any person who manages to practice in a single community for fifty years and at the end of that time is accorded as a "hero" deserves a medal, since all too often this person is accused of lapses of one sort or another and few are feted at the end of the period.

We congratulate Doctor Buxton for such an achievement.

MR. EWING

OSCAR EWING, the "Social Security" man, who wants to have the pleasure of spending several billions of dollars in "the promotion of public health," seems to be getting deeper and deeper into trouble as time goes on.

We have read page after page of his utterances during the past several months and they just do not make sense. In one utterance he makes what appear to be really flat statements, then comes along with another that is, to say the least, contradictory.

Not long ago he was interviewed by a group representing a good cross section of the United States. Rarely have we read anything that has amused us more. Time after time he made flat contradiction to things he had said but a few minutes before. However, he seemed not one bit flustered when these matters were brought to his attention.

As usual, he blamed everything on to the American Medical Association, stating "They do not want compulsory health insurance." For at least once he was right; American Medicine does not believe in that Utopian sort of thing and has opposed it for many years—it will continue to oppose such a program. We do not need it; already our various state organizations have taken over the health insurance program. That it is working out very nicely is indicated by what is being done in Indiana, over a period of just a few years. We worked out our own plan, raised the funds to get it going, and now it is one of the most successful plans in operation in the nation.

But, Mr. Ewing likes his job, as do all of his satellites—of whom there are legion—he has the "Go Sign" from the administration and, "Come Hell or High Water," he is going to do everything possible to get needed Congressional legislation to put the thing across.

It would be most interesting to see a list of his consultants in this project—we dare say we would find a lot of familiar names, names of many of the "pioneers" in the movement.

By the time this copy of THE JOURNAL reaches you, you will know what to expect, after the first of the year. If we are in for four more years of the New Deal, then no one can predict what

will happen. But, somehow or other, we are hopeful that things will change and that among these changes will be a "New Deal For Medicine."

THE COUNTY CORONER

FOR a good many years past the subject of the county coroner has been widely debated, most debaters taking the position that the law should be changed, the office of "coroner" abolished, and in its stead a "medical examiner" substituted.

There are many good reasons for the suggestion, chief of which is that all too often the county coroner is not competent to determine a cause of death. Another cogent argument is that the office long since has come to be a political one.

Another is the fact that in many of our counties the duly-elected coroner is a layman, usually without any knowledge of pathology and the other sciences that go to determine a scientific cause of death.

Again, there recently has been a tendency on the part of our morticians to take over the office, the reason therefor being very obvious—it would tend to "make business better." In one of our larger counties, this year, the candidates for this office, both Republican and Democratic, are undertakers!

Some time ago the Indiana Association of Pathologists, at its annual meeting, unanimously went on record in this matter, urging the state medical association to foster a move to end the coroner regime, substituting therefor the medical examiner system.

This would enable the setting up of a statewide plan whereby the investigation of deaths usually referred to the coroner would be properly supervised. It is our opinion that in a matter of a very few years the public would agree that a worthy change had been made in the aged system now in operation.

We have known coroners who have done a good job of it; on the other hand, we have known of communities where the entire system has broken down, much to the discredit of these communities.

The Indiana State Medical Association, through its legislative committee, would do well to make at least an initial effort to bring about changes in the present antique law that would, in due time, bring a lot of credit to our state association.

VA HOSPITALIZATION AND OUTPATIENT PROCEDURES

Officials of the Veterans Administration in Indiana have asked the cooperation of the state's medical profession in order to assure Hoosier veterans prompt hospitalization and out-patient treatment by the VA.

All eligible veterans who need hospitalization or out-patient treatment by the VA should contact or visit their nearest VA office, or the Regional office of the VA at 36 South Pennsylvania Street, Indianapolis. All emergency cases should be sent to the nearest VA hospital.

There has been an increasing tendency of both World War I and World War II veterans to apply at VA hospitals for medical treatment which can be obtained only through the Medical Division of the VA at the Regional office in Indianapolis.

Indiana's doctors can be a big help if they will tell veterans where to apply for treatment, and send only emergency cases directly to the VA hospitals.

Three VA hospitals in Indiana are currently operating on a capacity basis with veterans scheduled to enter the hospital as soon as beds are available. A priority system first admits those who are in an emergency condition and next those with service-connected disabilities. Only the first group—those veterans who are regarded as an emergency case—are admitted directly into the hospital at the request of the veteran's private doctor, his immediate family, or a service organization representing him.

Before 1946 the VA Regional Office in Indiana was combined with the VA hospital on Cold Springs Road. This led a majority of Indiana veterans to identify the Cold Springs Road Hospital as the only place to apply for medical treatment. However, the VA Medical Division was separated from the Cold Springs Road Hospital late in 1947. The VA Medical Division in Indianapolis is now fully staffed and equipped. It is located on the sixth and seventh floors of the VA Regional Office at 36 South Pennsylvania in Indianapolis.

The VA application form for hospitalization—10-P-10—is processed more rapidly when sent to the Regional Office Medical Division instead of a VA hospital.

The VA Medical Division schedules veterans for examinations to determine need for hospitalization and authorizes admittance to VA hospitals as soon as beds are available. The two general medical VA hospitals in Indiana have a capacity of approximately 750 beds. These two hospitals continuously operate at full capacity. Each month there are some 800 applications for hospitalization. Currently under construction is a 250-bed general medicine hospital at Fort Wayne.

FIRST SCHOOL HEALTH CONFERENCE A SUCCESS

ONE hundred and ninety-nine persons interested in problems of school health attended a one-day conference sponsored by the Committee on School Health and Physical Education of the Indiana State Medical Association at the Claypool Hotel in Indianapolis on September 29.

The conference, the first of its kind ever held in Indiana, brought together physicians, school administrators, nurses, teachers, physical education instructors and health educators to exchange ideas and to reach areas of agreement upon the subjects of (1) school health services, (2) organization and administration of the school health program, (3) the physical education program and the physician, and (4) the physician in the health and physical education program in rural areas. The persons in attendance were divided into four groups and took up the subjects informally in four "classrooms" with panels of physicians, school administrators, teachers and nurses participating in the discussions.

The luncheon was attended by 156 persons, who heard Dr. Cleon A. Nafe, president of the state medical association, welcome them and suggest that ideas developed at the conference be taken home and put into practical use. Ben H. Watt, state superintendent of public instruction, suggested that the medical profession and the teaching profession team together in a program for better health services in schools and communities. He complimented the medical association for making the conference possible.

The principal speaker at the luncheon was Dr. G. O. Larson of LaPorte, a member of the LaPorte Board of Education, who explained the school health program at LaPorte, considered among the best in the state. His complete address is printed in this issue of THE JOURNAL.

Dr. Fred V. Hein of Chicago, consultant in health and fitness, Bureau of Health Education, American Medical Association, recommended to the school executives that they invite the county medical society to appoint a committee from its membership to advise with him on school health problems. He urged similar conferences at the local level. Dr. Hein came to the conference as an observer, but was called upon to speak by Dr. Walter L. Portteus, toastmaster and chairman of the committee sponsoring the event. Dr. Hein was impressed with



SPEAKERS AT SCHOOL HEALTH CONFERENCE LUNCHEON

Participating in the conference luncheon program were (back row, left to right) Dr. Fred V. Hein of Chicago, consultant in health and fitness, Bureau of Health Education, American Medical Association; Dr. Walter L. Portteus of Franklin, chairman of the Committee on School Health and Physical Education, Indiana State Medical Association, who presided; Dr. Cleon A. Nafe of Indianapolis, president of the state association; (first row) Hon. Ben H. Watt of Noblesville, state superintendent of public instruction, and Dr. G. O. Larson of LaPorte.

the conference, saying afterward that the state medical association had taken a "forward-looking step which will be productive of both improved school health programs and better public relations." He intends to report in other states about the success of the Indiana conference.

Reporters sat in the four "classrooms" during the day taking notes. At a general assembly in the late afternoon they presented resumés of what was brought out in each discussion. The reports of the reporters are included in this article.

Before the conference adjourned each person was asked to fill out a questionnaire. The answers to the questions revealed universal approval of the conference and a request that it become an annual event. The fact that physicians, through the state medical association's sponsorship of the meeting, were offering their cooperation in developing better programs for school children brought a glowing response.

Some comments taken from the questionnaires follow:

"I liked the freedom of expression and exchange of ideas among doctors, nurses and teachers."

"The ice has been broken for more constructive cooperation between educators and medical people. I see a better school health program for youth as a result."

"What I liked most about the conference was the keen interest of the medical profession in school health problems. All school officials and local medical society members should be told the importance of attending such a conference."

"This seems a very good beginning for the fostering of better understanding and cooperation between local doctors and school administrators."

"I liked the participation of the doctors in the discussion and particularly their repeated suggestions that they need consistently to individualize their patients as 'persons' and not illnesses."

"At last the M.D.'s sat down with people who have been worried about a real problem and offered their help."

Approximately twenty-five physicians attended the conference, most of them being connected with school health services. Those who served on panels were Dr. Francis P. Jones and Dr. Joseph E. Tether, Jr., both of Indianapolis; Dr. Joseph H. Clevenger of Muncie, and Dr. Byron N. Lingeman of Crawfordsville, all members of the Committee on School Health and Physical Education.

The office of state superintendent of public instruction, the State Board of Health and the Bureau of Health Education, American Medical Association, assisted in making the conference arrangements.

The report of each discussion group follows:

SCHOOL HEALTH SERVICES

Miss Hester Beth Bland, *Reporter*

Members of the Panel:

Francis P. Jones, M.D., Indianapolis Physician—Moderator.

Edwin Estell, Superintendent City Schools, Washington.

Bernice LeMaster, School Nurse, Peru.

Floyd Raisor, Supervisor of Health, Physical Education, Muncie.

Hester Beth Bland, Indiana State Board of Health—Reporter.

Introduction:

It is impossible to record the excellence or the detail of the discussions entered into by the panel members and the group. The informality of the meetings encouraged everyone to enter freely into the discussions. As a result many opinions were expressed and many suggestions offered for consideration.

This summation is a brief account of the discussions and represents in outline form the important subjects which were most common to the four meetings of the panel.

I. **Immunization**

A. Goal—to immunize every child.

B. A continual program of immunization is recommended. This should be worked out by each local community according to its needs and facilities. It should be a program of service and education planned and initiated by doctors, nurses, parents, teachers, and other interested community groups.

C. A question was raised regarding the advisability of legal requirements for compulsory immunization. No recommendations were agreed upon.

D. The importance of an effective follow-up program was emphasized with the following suggestions offered as a means of accomplishing such a plan:

1. Educational campaigns.
2. Cooperative plan involving the school nurse, classroom teacher, and parent groups.
3. Financial aid for such program might be provided by a club as a public service feature.

II. **Medical Examinations**

A. A complete physical examination for every child should be the goal. Apparently the need is for a health inspection rather than health examinations, since the subjects are, generally speaking, healthy children.

B. Periodic examinations are recommended to be given in 1st, 4th, and 8th grades.

C. Special examinations are recommended for those who need special attention.

D. There will be no infringement upon the medical profession since the child is referred to his family physician.

III. **The Role of the School Nurse**

Because of the peculiar position of prestige a nurse occupies, she is called upon to perform many jobs. She has the confidence of the parents, teachers and administrators, hence her services are in great demand. Many times the nurses' finest work is left undone because she is overloaded with chores.

It is recommended that the nurse may work as a director of other departments—or in close cooperation with them—with other personnel available to perform the busy work.

IV. **Teacher Observation**

A. Teachers should feel responsibility toward all aspects of health, including the recognition of symptoms of communicable diseases.

B. Teachers are willing to assume these obligations but often have not received adequate training to qualify them for such responsibilities.

C. Teacher training institutions should offer adequate courses to prepare the teacher for the job he must do.

D. The teacher should receive in-service training to prepare him better to meet these health problems.

E. School administrators should adopt certain clear-cut and well-defined policies in order that the teacher will know how and to what extent to proceed.

V. **The Use of Personnel**

A. An efficient and adequate school health program is the responsibility of all the people in a community.

B. There is a great need for more effective use of the personnel that is available presently.

1. The prime excuse offered is shortage of personnel—no one is to do the job. But every community has doctors, nurses, teachers, janitors, parents and pupils. A better use of this personnel is vital.
2. The organization of school health committees will prevent overlapping and omissions of services.
3. The one outstanding means of improving the present health program is the coordination of all services.

C. If and when the present personnel and facilities are giving optional service the job becomes one of education. For, if the people of the community are intelligently informed that additional health services are needed to insure improved welfare of the children, these services will be provided.

ORGANIZATION AND ADMINISTRATION OF THE SCHOOL HEALTH PROGRAM

MALCOLM MCCLELLAND, *Reporter*

The panel on the Organization and Administration of the School Health Program discussed six topics under this general heading with much attention being given to the problem of "Planning For Care of Emergencies."

In regard to this problem of emergencies it was agreed upon and recommended that schools have definite policies in regard to the handling of emergencies. The seeming lack of cooperation from the medical groups was due to the lack of policy on the part of schools, and it was felt that with real plans, more complete cooperation might well be had with other groups.

Another recommendation was that the parents be contacted by the school in emergency cases, or the family physician. (It was also suggested that an alternate physician be listed in case the family physician was not available.) As another alternative, contacting the local police or County Sheriff in the case of emergencies needing urgent medical attention was suggested.

It was further recommended that physicians be informed and understand the difference between athletic injuries and injuries that occur in a regular physical education class. Athletic injuries are generally paid for from athletic funds but physical education injuries are rarely handled by a school unless the school is completely covered by some insurance plan. It seems that in the past some physicians have informed families that the school's responsibilities and the financial obligations go hand in hand with various injuries occurring within and around schools. This is not always the case.

In regard to "Laws Affecting the School Health Program," it was agreed that they were sufficient in number, but that it was the responsibility of the school officials to see that the laws in existence at the present time be used and enforced. It was also agreed that some of the present laws were not applicable in so far as exclusion from school was concerned but that recommendations were being made at the present time regarding the period of time that a child should remain out of school when having contracted certain diseases that require exclusion.

The keynote of practically all the panel sessions

that this particular group had might be summed up with the one word "cooperation." It was unanimously agreed that the *Health Council* was probably the best single way to discover and to iron out the many problems that seem to confront the schools and the communities at the present time. It was agreed that both the medical profession and the school be familiar with each other's policies regarding this broad problem of school health.

It was also recommended that the cumulative health record (a standardized form for state-wide use) be considered, and it was agreed that such a record would be invaluable information for any school to which a student might transfer.

In regard to the question concerning "Physical Properties in Relation to the School Health Program," it was generally agreed that before it was possible to determine the needs of a school, the school would have to determine exactly what it intended to accomplish in its school health program. One point which seemed to draw some comment from the group was in regard to inadequate facilities for showers, et cetera, in many of the elementary schools. At this level, where habit formation is so important, the lack of desirable physical properties would certainly affect the long-range school health program.

The following are blanket recommendations that require little or no explanation to be understood. The group recommended that some effort be made to further parent education and guidance. It was recommended that a school committee be organized to support the school health program. It was recommended that something be done about the false health emphasis that goes along with perfect daily attendance. The group realized that the "average daily attendance" figures have supplemented operational funds in schools and this of course has a major school health implication. It was further recommended that an adequate school lunch program be given the utmost consideration if a good school health program is to be carried out.

PHYSICAL EDUCATION PROGRAM AND THE PHYSICIAN

Samuel H. Hopper, *Reporter*

The following are some of the more important points that were brought out with regard to the two topics:

a. Excuses from Physical Education.

b. Medical Examinations for Athletics.

The physically handicapped children are always excused from physical education on competent medical advice. It was pointed out that a more positive attitude would be to provide corrective training for these children. The physicians agreed that, in general, they failed to indicate on their examinations: (a) what is wrong with the child; (b) how long to excuse him from athletics or physical education; and (c) what kind of a modified program that child should take.

On the other side of the ledger, it might be said that the physical education people have failed to express that program in simple language, and have not informed the physician by means of a pamphlet just what are the basic qualities of the physical education and athletic program in the schools. This could be used as a guide and the physician could then suggest to the school authorities that the child take program marked a, b, or c, on the pamphlet provided for his guidance and information. It was generally agreed by all that the examinations as done at the present time are almost worthless. That is for a variety of reasons. It was suggested that a brief form be recommended for physical examinations and that it be used by "those who were licensed to practice medicine in Indiana."

There was a great deal of discussion as to whether cultists were competent to send in this type of report, and the general conclusion was that physical education people could best be guided by that portion of the previous sentence given in quotes.

It was generally agreed that the physicians and physical education people should better understand what the objectives of the program are. The question as to who should do the examination, the family physician or a team of physicians, as in the Army, was also discussed. It was suggested that a combination type of program be used. There was strong sentiment against those physicians who merely sign a card and send it to school without having seen the patient.

Passing on now to portions c. and d. of our program—"Definition of the Scope of the Physical Education Program," and "Physical Activity and its Relation to Health." A routine physical education program is wrong because of individual differences between children. Modified programs are of great value because of the fact that they are functional and supply individual needs. Under some circumstances, however, it is difficult to provide a diversified program without adequate funds. It was felt that the primary requisites in such a program are (1) postural problems; (2) muscular coordination; and (3) to provide intelligent motivation for youngsters.

It was brought out that there is a difference between nervous fatigue and physical fatigue. Nervous fatigue then brought up the question of proper mental health. It was repeatedly pointed out that there is a need for emphasis on individual sports, such as golf, tennis, fly-casting, archery, and other things. Mr. Caldwell, superintendent of schools at Hammond, pointed out that we need less

pretentious gymnasiums and larger playing fields for all-weather use.

Concluding with portion e.—"Athletic Activity Outside of School Hours," it was recommended that teachers be made more health-conscious and that this viewpoint could then be passed on to the students, so that there could be a carry-over of this philosophy after the child receives his diploma and goes on. There is a need to coordinate athletics and physical education, there being a gap between these two. Sometimes community pressures have an effect on the objectives of certain of these programs.

THE PHYSICIAN IN THE HEALTH AND PHYSICAL EDUCATION PROGRAM IN RURAL AREAS

MALCOLM A. MASON, *Reporter*

a. Physical properties in relation to the School Health Program in rural areas.

b. Planning for health services in rural schools.

c. Community resources available in rural areas in relation to health.

Health education, health environment and health services are directly related to the above problems. From the very beginning of group discussion it was generally accepted that school health is directly proportional to community health, and that any improvement in health would depend by and large on a good program of health education.

Health education in the schools means the use of all natural situations occurring in the school day to give the children an understanding of the practices which help one to be well and live more effectively. These practices promote nutrition, growth, rest, sleep, adequate medical and dental care, control of infection, care of eyes and ears. In the community health education would call to attention all sanitary problems concerned with garbage and sewage disposal, safe water, safe milk, clean public eating places and desirable recreation centers.

The lack of facilities, and the reticence on the part of the community in improving the environment, was acclaimed to be a very important factor.

Health services, physical examinations, lunch programs, should be a part of the health education curriculum. Health services should become a teaching program. For example, the school lunch program is an important activity of the schools; however, the failure to make this an educational program would limit the value. Here again we find that facilities are necessary for an effective program.

A great amount of time was spent on the discussion of health services that should be developed to bring optimum health to the community.

Immediate need:

1. Public health nurses.
2. Medical cooperation.
3. Type of nurse and training.
4. Better understanding of problems on both sides.
5. Cooperation of administrators, nurses, teachers and parents.
6. More joint planning and formulated policies.
7. Make better use of existing facilities and organizations—TB Society, Cancer Welfare, Crippled Children Welfare and others.

Two very important recommendations came about as a result of this discussion:

1. Organization of Advisory Health Committee or Citizens' Committee from each county. The Medical Society from each county should appoint a committee to work with the overall committee. This committee would plan programs, establish policies and be responsible for health education in community.
2. That every county be mandated by law to employ at least one public health nurse.
3. Recommended compulsory vaccination.
4. Broad program of physical education with more supervision.
   a. More thought given in adopting physical education program to individual.
   b. More emphasis on physiological adjustment other than physical.
5. More thorough and complete medical examination in our schools through community planning.
6. More thorough and complete medical examination for food bundles plus continual education.
7. X-ray program in schools to include practice teachers, college and university teachers—not just public school teachers.
8. More opportunity for vocation schools to take care of those students who cannot adjust themselves to present school system.

THE LA PORTE SCHOOL HEALTH PROGRAM

G. O. Larson, M.D.

LA PORTE

PERSONAL anecdotes are useful in revealing certain facts which may prove helpful in evaluating what a speaker says and why he says it. For this reason, and because it will serve to emphasize two points, I take the liberty of talking briefly about myself.

During my senior year in medical school, Wednesday was always a particularly long and tiresome day. Clinics and lectures took us first to County Hospital, then to Wesley, then to St. Lukes. Finally, from 4 o'clock to 6 o'clock there was a class in medical jurisprudence at the medical school on Chicago's near north side. Presiding was one of the most cultured gentlemen I have ever known, Doctor Udelson, a graduate of Harvard, then of a Jewish Theological School, then of Harvard Law School, then of Northwestern Medical School, and finally, a specialist in psychiatry. It was his habit at the beginning of each lecture to quiz four students, always chosen by the alphabetical order of their names. On this Wednesday, my roommate and I were tired, having had dates the previous evening. Knowing it was not our turn to be called upon, we found seats in the rear of the lecture room and relaxed. Just as I started to doze Doctor Udelson finished his quizzing and said, "Now gentlemen, we will take up the subject of larceny." Somehow the last word penetrated through the haze, I sat bolt upright, raised my hand, and said "Here I am, doctor." The ensuing laughter brought blushing and confusion, and it wasn't until class was over that I actually learned what had happened. The good doctor never forgot me after that.

Now the point is this—your speaker is just a common, ordinary individual, even as most of the other 140 million people who live in this country. He does not pose as, nor is he an expert in the field of school health programs, or in any other aspect of school or health work. It sometimes seems that we have been so bombarded by the opinions and advice of so-called experts—with an axe to grind—during the past twenty years, that we have become almost instinctively skeptical and tend to shy away from any change in our present way of doing things. Fortunately, in every community, be it large or small, rich or poor, people exist with the ability to develop a sound, adequate school health program which will fit both the resources and the particular needs of that community. Of course, the help and advice of trained, experienced workers in this field can be very valuable, yet the fact remains that upon the members of the teaching, medical, dental and nursing professions rests the responsibility for the development and continuous improvement of school health facilities.

The second point is well illustrated in some advice given me shortly after I began the practice of medicine. It was my good fortune to be associated for two years, or until his death, with an uncle, Dr. O. L. Sutherland, who was a master in the art of practicing medicine, a man possessed of keen business ability, and an outstanding, public-minded citizen of La Porte for many years. Listen to this: "Always remember that you owe something to the profession from which you make a living and to the community in which you make a living!" Sound advice, isn't it?

An appointment as a member of the La Porte Board of Education presented the opportunity to make use of my professional training and experience in helping to formulate and carry out plans which we hope will ultimately approach an ideal situation. Communities vary in size, wealth, facilities and tradition. A plan designed for one may have certain aspects which are not applicable to others. Experience has shown us where we have made mistakes. We recognize imperfections which need to be corrected. Likewise, it is true that trustees of public money may not always be wise or able to expand services as rapidly as desired. Yet "where there is a will there is a way." We have the will. We trust we are proceeding in the right way. With the hope that there may be something of interest and possibly of value for you, I will attempt to present some of the philosophy of our thinking and an outline of the La Porte School Health Program.

There is probably no one completely satisfactory definition of good health, but for the sake of discussion "good health may be conceived as a state of harmonious functioning of all of the cells, tissues, organs of the human body, together with a mental attitude that envisions constructive, wholesome activity directed toward a reasonable goal, and with due regard for the equal rights of one's fellows in cooperative activities commonly known as society." It is admitted that this definition may be subject to criticism by the church, but it is, I think, broad enough for our use.

In accordance with this definition every employee of a school system is directly concerned with the health of the pupils. Legal responsibility for this as for all phases of school activity rests squarely on the Board of Education. Consequently, realizing the importance of securing the interest and active cooperation of teachers and parents as well as that of the medical and dental professions, our Board authorized the formation of a Health Council and delegated to this council the duties of formulating health policies and of supervising and participating in the actual carrying out of the policies.

The Health Council is composed of 3 physicians, chosen by the medical society, 3 dentists chosen by the dental association, the 2 school nurses, a representative of the Board of Education appointed by the board, the superintendent of schools, the director of physical education, and the health chairman of the La Porte Parent-Teacher Council. The council is organized with the usual president, vice-president, secretary, treasurer, and one member to handle publicity for the newspaper and the Parent-Teacher Association. The sum of $400 per year has been turned over to the treasury by the Board of Education for the past two years. This amount is approximately 50c per pupil for those who were examined by the doctors and dentists for the physical education program in high school, when examinations were required in all war gym classes. Our doctors and dentists refused to accept compensation for this service during the war. It was the feeling of the board that it would have been unfair to ask for the same service free after the conclusion of the war; hence the offer of this modest sum. However, the doctors and dentists on the council felt that the money should be used to further the work of the council. Both professional organizations concurred and members are continuing to make physical examinations without charge. However, it is the intention of the council eventually to pay for the service. An example of the manner in which funds are expended was the purchase of dental examination chairs and a quartz lamp for diagnosis of scalp ringworm. Copies of the charter under which the Health Council operates are available for those who may wish them. It may be of interest to know that the council's financial records are audited by the State Board of Accounts, as are the funds of all extracurricular activities.

Among the accomplishments of the Council to date the following may be mentioned:

(1) The problem of periodic health checkups for the students was something needing early attention by the Council. For many years physical examinations were done only on entrance to kindergarten and high school. Upon the suggestion of our nurses a plan of "skip grade" exams was thought to be more ideal. By this method the intermediate age groups are examined by checking the 4th, 7th, 9th, and 11th grade pupils. For instance, the group from the 4th and 7th grades were examined during the spring terms and the 9th and 11th grades during the fall term. However, the program includes newly admitted students or any between these grades who are identified as needing some medical attention or a survey.

Each physician and dentist of La Porte will work about three hours twice a year to examine about twenty to thirty students. Our present plan is for two doctors and two dentists to examine these groups of twenty to thirty and the exams are carried out over a period of two or three weeks. This avoids the confusion of having such a large group when facilities of examining rooms, tables, chairs and assistants are limited.

Prior to these examinations our nursing staff has done routine urinalyses, visual and hearing tests, and have applied the tuberculin tests to be read by the physician at the date of the medical examination.

Results of the physical examinations are tabulated on an individual sheet for each student and then a follow-up on the abnormal condition is planned by the school nurse. The defects found are noted on a referral slip which is sent to the family doctor by way of the students and parents.

(2) An early problem settled by the Health Council was the matter of regulations for control of the student with a contagious disease. The Council brought existing regulations up to date by revising long standing rules for quarantine and isolation. Many were shortened as has been done in larger cities since the advent of sulfa drugs, penicillin and streptomycin. These new regulations were submitted by the Council to the physicians of La Porte, who voted their approval.

There has not been sufficient time to make an adequate appraisal of our findings from the present method of checking our students' health, but the Council members will discuss the follow-up on the defects noted. Our school nurses will act as a hard working liaison group between the sick child, the parent, and the family physician and dentist.

(3) Physical examination of pre-school children. Smallpox vaccination and diphtheria immunization required.

(4) Cooperation with and coordination of planning with all parochial schools.

(5) Supervision of duties of athletic physician. Incidentally the High School Athletic Association carries accident insurance on all those participating in sports programs.

(6) Furnishes aid and advice on programs of the two school nurses. Included here are approval of routine orders for handling of emergencies, medication, et cetera.

(7) Gives advice on program of sex education.

(8) Supervises program which requires a complete physical examination of every custodian before employment, of every teacher before a tenure contract is issued, and of any employee of the school city if, in the opinion of the superintendent or the Board, the character of the work of said employee indicates that a health condition may be involved.

(9) Has formulated plans for inaugurating the fluoride treatment for prevention of dental caries.

There are obviously many factors which contribute to the health of a school child. Responsibility for the provision of an adequate diet, proper clothing and medical care, when needed, rests upon the parents. Upon the schools falls the duty of providing physical environment sufficient not only to meet educational requirements and needs but at the same time to protect the health of the child. Such matters as heating, ventilation and lighting are of great importance. A discussion of lighting alone would require a separate and rather lengthy

presentation. It may be added that lighting in the majority of school buildings is notoriously bad. It is scarcely necessary to do more than state the importance of minimizing fire hazards and proper sanitation. The fact that more time is not devoted to these subjects does not indicate that we underestimate their value, but rather that it is desired to emphasize certain other points.

Worthy of mention here is the fact that one of our school nurses functions as the attendance director, but with a full-time assistant.

Because of its importance it is well to call to your attention the complete program of physical education, varsity and intramural sports which is maintained. The physical education program in the high school may be divided into the following classifications: (1) Physical Education classes for all freshmen and sophomores, (2) Physical Fitness, an elective advanced gym class for juniors and seniors, (3) Intramural activities, (4) Sports—major and minor. The girls' program is the same as the boys, with the Girls Athletic Association replacing the sports as designated in the boys set up. The sports program includes the following activities:

1. Football—freshmen, "B" and Varsity.
2. Basketball—freshmen, "B" and Varsity.
3. Baseball—freshmen, "B" and Varsity (Spring).
4. Track—freshmen, "B" and Varsity (Spring).
5. Cross Country—Varsity (Fall and Spring).
6. Golf—Varsity.
7. Tennis—Varsity (Fall).
8. Swimming—Varsity (Winter).

The Junior High sports program is as follows:

1. Football—"A" and "B" teams.
2. Basketball—"A" and "B" teams.
3. Track.
4. All City Basketball League for Junior High Schools.
5. All City Basketball League for Elementary Schools.
6. All City Softball League for Elementary Schools.
7. All City Touch Football League for Elementary Schools.

Boys intramural program includes basketball, ping-pong, free throws, softball, baseball, track, bowling, volleyball and rifle club. Girls intramural program comprises volley-ball, softball, bowling, track, basketball, ping-pong and swimming. Girls Athletic Association program has soccer, hiking and camping, volleyball, ping-pong, basketball, track, bowling, badminton, archery, swimming and lifesaving. Boys physical fitness classes feature touch football, softball, track, basketball, swimming, lifesaving, advanced tumbling, speed ball, soccer, volleyball, and calisthenics.

Certainly a sound body and a sound mind go hand in hand and are equally important. With her permission I will give verbatim the notes which our elementary supervisor, Miss Leila Armstrong, prepared for me. I believe her statements could not be improved upon.

"The La Porte school system provides for the mental and emotional health of the child as well as for his physical health.

"As in the physical health program, the emphasis is placed on prevention. Since most of the failure can be traced either to immaturity, emotional unbalance, physical defects or environmental factors, it is thought wise to make a case history of each child as soon as possible after he enters school.

"Each child is given an individual Binet Intelligence Test either before he enters kindergarten or soon thereafter. When the test is given before entrance, it is done to determine whether or not he has reached a mental age of 5 years and 5 months which is the chronological age required for entrance. These tests are given to children between the ages of 5 years, 4 months and 5 years, 6 months.

"In addition to determining mental ages a large number of prognostic tests are given. These are done early in the kindergarten child's experience so that any tendency which might cause failure in academic work may be cleared up before he reaches first grade.

"The prognostic test can be a large factor in determining tendencies; for example, the tendency to reverse letters or numbers when writing, and the tendency to read from right to left rather than left to right can be quite easily determined. The child is tested for lateral dominance to determine his eyedness, footedness, and handedness. If he is mixed in dominance, the teachers are trained to train the child so that he will probably have no difficulty as a result of it.

"In addition to this, he is given auditory tests which help to determine his ability to discriminate correct pronunciation of words, ability to discriminate sounds accurately, and ability to reproduce ideas. The visual tests measure his ability to differentiate between reversed letters and words, his ability to make finely coordinated eye movements and his ability to recall visual symbols. He is also given a readiness test. The theory back of all this testing is that if failure can be avoided, he will be properly adjusted mentally and emotionally, and he will suffer no experience of frustration when attempting first grade work. This is almost sure to guarantee that he will be properly adjusted in relation to his school work. In addition to these tests, a rather complete case history is made for each child. Conferences are carried on with parents to determine the childs needs in relation to his home and everything that is possible is done to insure his adjustment to the environment in which he lives. If he is emotionally disturbed, effort is made to determine the cause and as much as possible is done for him.

"In addition to the previous work done for children in kindergarten and all other grade levels, a department of Remedial Instruction has been organized. Specially trained teachers give their full time in each of the five elementary buildings in diagnostic and remedial reading, arithmetic, and spelling, and individual time is given to children each day in a room called a Restoration Room. The Restoration Room is as attractive as it can be made and the surroundings are such that the child being helped feels that it is a distinct privilege for him to come to this room. In fact, many children who do not need the work ask for the privilege because it looks so interesting to them. The rooms are all equipped with teacher-made materials as well as scientific apparatus and materials for diagnosing difficulties. The Keystone Tachistoscope-Flashmeter as well as the Telebinocular is used in determining



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RESEARCH IN THE SERVICE OF MEDICINE

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many of the reasons for reading failure. Eye movements are measured and the child is given a thorough examination to determine exactly what causes his trouble. These teachers are trained also in clearing up poor habits. Most of these children are restored to their grades in a remarkably short time, completely able to do the work of their regular grade. They are also identified with their age grade group at all times during the day except for the thirty minute period in which they are getting individual help from their remedial teacher in the Restoration Room. We have seen many children who were completely discouraged go to the Restoration Room for a short period of time, get their difficulties cleared up and be able to work successfully again, and who now have changed from completely frustrated, emotionally upset children to confident, well adjusted individuals. In many cases the difficulty is so severe that it is necessary to resort to the Fernald or Kinesthetic method of teaching.

"Since these departments have been organized, there has been such an improvement in pupil attitude toward school that the school system has decided to carry on this program indefinitely and to increase the possibilities for children as rapidly as the financial situation will allow."

In conclusion, let me state that no attempt has been made to evaluate the various component parts of our health program. We realize that even if every detail were in operation and functioning smoothly, it would not be perfect. However, no problem is ever solved by neglect and we are confident that we are on the right road.

Now let me address a few remarks to the members of the medical and dental professions. Health is our business. Now that another draft is a reality in our country it is a foregone conclusion that the critics of medicine will once more happily search for evidence that we have failed in our duty to the public. In spite of the fact that careful analysis revealed that those favoring compulsory health insurance grossly misrepresented the facts about the condition of the health of our boys, it is certain that much remains to be done before we can say we have done our best for the youth of our country. I can conceive of no possible opportunity more brilliant in its promise of sound achievement and lasting satisfaction than aggressive, whole-hearted cooperation in school health programs. To the educators present I will simply say this—the members of the healing professions will not be found wanting!

THE VOCATIONAL NEEDS OF PREFRONTAL LOBOTOMY PATIENTS

Maurine R. Miller, Ph.D.†

INDIANAPOLIS

The increasing use of psychosurgery for mental disease has created the need for vocational rehabilitation of these patients. At the present time the patients return to their homes after the hospitalization following surgery. Although they are physically capable of working, they usually are not able to hold a job. The families find their tempers growing short and their patience declining when they have to cope constantly with the behavior deviations of some of these cases. The task of caring for the patient and helping him to return to a useful place in society is made more difficult merely by the fact that there is no letup or relief from the responsibility from day to day. Nor is there the feeling of working on the problem with an outside source and getting encouragement from a sharing of the responsibility with competent resources. Consequently, the convalescence and return of psychosurgery patients to improved mental health is frequently a discouraging problem.

Indianapolis Goodwill Industries have had a number of applications for employment of prefrontal lobotomy cases. Because the Industries serve the handicapped, it is a logical place in many ways for such problems. The supervisors are accustomed to exceptional demands and needs of the employees. Many times a job is built around the employee instead of a rigid selection of an employee to fit the job. Thus Goodwill has undertaken a small experimental rehabilitation program with two prefrontal lobotomy cases. One case has been under way long enough (nine months) to evaluate some of the progress and problems.

Our first client who had undergone lobotomy was a man 37 years old who had been a clerk in a bank. Before surgery he had been in Central State Hospital for seven years, with a diagnosis of dementia praecox. None of the usual treatments had been effective and hospital authorities told his family they could do no more. After surgery he had become communicative and pleasant but irresponsible. He wandered away from home on several occasions.

The psychologist attempted to give the Wechsler-Bellevue Intelligence Scale as a first step toward understanding what type of tasks could be most advantageously assigned and what areas of mental functioning showed outstanding weaknesses. In this testing session the patient's attention was extremely erratic. After a half hour of testing he put his pipe in his mouth and walked out. He was

† Psychologist, Indianapolis Goodwill Industries, Inc.



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most agreeable but frequently not responsive. Nevertheless, his performance on the verbal tests held up to average except "Similarities," on which he got only one small credit. This test measures conceptual thinking and ability to generalize. On the performance part of the Wechsler-Bellevue Scale, his responses were low except for "Object Assembly," a puzzle-type test. His intelligence quotients were low average, the verbal being higher than the performance intelligence quotient. However, it is not the numerical quotients which are so important in this situation as the qualitative pattern revealed.

During the exploratory period of six weeks, the patient was given as many different jobs in the Industries as was feasible in view of his abilities and past experience. He took buttons off strips of material, marked prices on pricing tags, folded, stuffed envelopes, lettered posters, made out new cards for office files, transferred information from one card to another, and ran up sales totals on the adding machine. He did all of these jobs creditably, except lettering, but he did not stick to them. He walked to the water fountain, the rest room or the window. A great deal of time was spent in simply staring. At the end of the exploratory period he was placed as the cashier's assistant. It was felt that his attention span was longer and his production greater when he had been using his old computational and adding machine skills. He has continued in this placement. Additional tasks have been given to him by the cashier until now he does a variety of jobs: counting and checking payroll cash, remembering to deliver the cafeteria purse, pays postman postage due on mail, totals inventory sheets, makes summary sheet of daily sales records from five stores and totals them, operates mimeograph, goes on errands, both in and outside the plant, and occasionally takes pickup calls. He has had the close supervision of a woman who understands his problem and who, although she is patient and good-humored, is very firm and definite about what she wishes done. It has been our opinion that this supervisory attitude has been an important factor in his progress. He does not leave his work now except at specified rest periods or for assigned errands. He still daydreams occasionally.

Retesting at the end of five months with the Wechsler-Bellevue Scale showed slight improvement in seven of the ten subtests. Improvement was greater on the performance scale than on the verbal scale. His improvement in expressing similarities between pairs of words was marked. He gave excellent attention during the whole test, which in itself is a marked sign of improvement.

The second lobotomy patient has not been with us long enough in our rehabilitation program to evaluate results. Her problems, both before and after lobotomy, were quite different but there are some points of similarity. She lacks feelings of responsibility, does not display foresight or planning, and needs close supervisory contact.

The Goodwill Industries' experience in this experimental program and the requests for employment from the families of these patients indicate that vocational rehabilitation should be part of the whole postsurgical treatment of patients who have undergone prefrontal lobotomies.

TREAT RESPIRATORY INFECTIONS WITH PENICILLIN DUST

Inhalation of penicillin dust is a valuable treatment for the common cold, chronic sinusitis, bronchitis, bronchial asthma with acute or chronic bronchitis, and pneumonia, report three physicians. Writing in the October 2 issue of *The Journal of the American Medical Association*, the physicians describe a test of the treatment in 357 cases.

Louis Krasno, M.D., is from the Department of Clinical Science of the University of Illinois Medical School; Paul S. Rhoads, M.D., is from the Division of Medicine, Northwestern University Medical School; and Mary Karp, M.D., is from the Division of Surgery, Northwestern University Medical School, and the Department of Anesthesiology, Wesley Memorial Hospital and Passavant Memorial Hospital.

Of the 169 patients treated for the common cold, 42 percent were considered cured. Thirty-eight patients were treated for acute and chronic sinusitis, 41 were treated for acute and chronic bronchitis, and 24 were treated for bronchial asthma with acute or chronic bronchitis. Of these, 13, 17, and four patients respectively were freed of symptoms. Four out of six patients treated for pneumonia were freed of symptoms. Other patients in the study were treated for various other infections of the respiratory tract.

Penicillin dust often relieves the stuffiness and congestion of a cold immediately, the physicians say. It also reduces the pain of an acutely sore throat within one-half to one hour following treatment in some cases, they found. Of the entire group, 134 patients, or 37.5 percent, were judged "greatly improved," and 129 patients, or 36 percent, were judged "moderately improved."

The treatment consisted of inhaling penicillin dust one to three times daily. Three to six minutes were usually required to inhale the amount used, and patients were not allowed to eat or drink for one hour after each inhalation. Some of the patients used a plastic mouth inhaler. This type of apparatus reduces the possibility of allergic reactions from the penicillin dust as it keeps the penicillin from coming in contact with skin of the face, the physicians emphasize. Only 3 percent of patients who used the plastic inhaler showed allergic reactions—irritation of the throat and inflammation of the mouth.

Inhalation therapy with penicillin dust permits a patient to "go about his business without loss of time and with minimum expense," they point out, adding: "Before the use of the present method, many patients with chronic pulmonary disease were not given adequate treatment because of the expense of prolonged hospitalization and equipment."

Five patients have been given treatment with streptomycin dust by the physicians, but sufficient data are not available to permit a clinical evaluation.

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ESTINYL LIQUID, 0.03 mg. per 4 cc. (teaspoonful), in bottles of 4 and 16 oz.

BIBLIOGRAPHY: 1. United States Dispensatory, ed. 24, Philadelphia, J. B. Lippincott Company, 1947, p. 1446. 2. Wiesbader, H., and Filler, W.: Am. J. Obst. & Gynec. **51**:75, 1946. 3. Allen, W. M.: South. M. J. **37**:270, 1944. 4. Lyon, R. A.: Am. J. Obst. & Gynec. **47**:532, 1944. 5. Groper, M. J., and Biskind, G. R.: J. Clin. Endocrinol. **2**:703, 1942. 6. Soule, S. D.: Am. J. Obst. & Gynec. **45**:315, 1943.

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Medical Panorama by the Associate Editor

Anti-Vivisectionists

It seems strange that, at a time when the world is blessed with a profusion of medical discoveries and a constantly increasing array of new therapeutic agents, there should be a flourishing and serious threat to the continuance of the research which makes such things possible.

Anti-vivisectionists have been active for many years. In some parts of the country and at least for part of the time their influence has been ineffective, and could often be considered as a nuisance only. Evidence that the movement may be able to stop all animal research in some states was presented to the public in the July 24th issue of *The Saturday Evening Post* by Dr. Virgil H. Moon and David Wittels.

Doctor Moon will be remembered as former Professor of Bacteriology and Pathology at Indiana University School of Medicine. His article makes good outside reading for physicians. It is an excellent source of information regarding the weird mixture of crackpots, smart promotion schemes, and gullible old ladies, that go to make up the anti-vivisection societies. It is also a splendid account of the disordered and inconsistent thinking of which some human beings are capable, and which seems to be the heart and soul of the anti-vivisection crusade.

During recent years several state legislatures have considered bills which have proposed to make illegal the use of animals for experimental purposes. The serious part of the situation is that, in some instances, the bills have been defeated with difficulty. On the other hand, bills introduced to encourage biological research by setting up a legal method for the supply of laboratory animals have usually failed of passage due to efforts of anti-vivisectionists.

One has only to contemplate the effect of the cessation of biological assay of drugs to realize what a catastrophe would be produced by the enactment of such legislation. The standardization of potent drugs by animal testing is the one step which confers on many modern drugs the attribute which makes them most useful. The effective dose of digitalis and insulin, for example, can be administered only if the drug is standardized. It is incomprehensible that any rational person would wish to deprive doctors of the advantage of prescribing drugs in dosages which will attain their full pharmacologic effect within a short time.

Doctor Moon's discussion goes a long way toward explaining why anti-vivisectionists are working toward such fantastic ends—the answer is that they are not rational individuals. Their societies, in addition to their anti-vivisection campaigns, have adopted other idiotic theories, such as the one which denies the existence of bacteria. Under this theory they attempt to claim that the science of bacteriology and the entire system of medicine which studies and treats diseases of bacterial origin are deceptions propagated only to increase the volume of medical practice.

The National Society for Medical Research has conducted a survey of medical schools to determine the extent to which the movement is hindering medical education and medical research. Of the 54 schools answering the questionnaire, 37 reported that research was held up, or teaching interfered with, as a result of anti-vivisection propaganda. Some reported the curtailment of courses in dog surgery; others stated that research projects had been greatly prolonged and even abandoned.

That such vicious obstructionism is accomplished by a very small and vocal minority is evidenced by the fact that the great majority of people are intensely interested in medical research, and contribute many millions of dollars for its furtherance in the fields of cancer, poliomyelitis, heart disease, and in other diseases.

In regard to the efforts of the medical research workers toward the passage of legislation which will provide a legal means of insuring the supply of laboratory animals from those which are impounded and destroyed, one is reminded of the chaotic state of affairs occasioned by the necessity of obtaining cadavers for anatomical laboratories prior to the enactment of legislation on this subject. The laws which govern the supply of human anatomical material have eliminated entirely the bitter controversies and sub rosa manipulations which formerly involved all those concerned. It is to be hoped that the difficulties which now confront medical research and medical education will be greatly lessened by the passage of similar laws in the field of animal research.

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News Notes

Dr. Marion C. Drake recently opened an office for the practice of medicine in Elwood. He is a native of Frankton and a graduate of Indiana University School of Medicine in 1946. Doctor Drake served his internship at Wisconsin General Hospital, at Madison, Wisconsin, and a residency at St. Francis Hospital in Indianapolis.

Dr. Charles Gullett, of Union City, recently began the practice of medicine there. A graduate of Indiana University School of Medicine in June, 1947, he spent his internship at Memorial Hospital in South Bend.

Dr. John James Head is now with the teaching staff of the Department of Psychiatry of the University of Louisville School of Medicine, having resigned his position as assistant superintendent of Madison State Hospital.

A native of Washington, **Dr. Kenneth G. Hill** recently joined the staff of the New Castle Clinic. Following his graduation from the Indiana University School of Medicine in 1939, Doctor Hill spent two years in the Rochester, New York, General Hospital, and then entered service with the Army Medical Corps in 1941. He spent five years in the service, three of which were in the European theater. He was discharged with the rank of lieutenant colonel. Since his separation from service he has done postgraduate work at St. Elizabeth Hospital, in Lafayette.

Dr. Amos Reusser, of Berne, was honored recently by being chosen as "Family Doctor of the Year" by the Southern Homeopathic Medical Association, of Bristol, Connecticut.

Dr. E. G. Dimond, of Indianapolis, is taking a year's residency in cardiology under Dr. Paul White at the Boston General Hospital.

Having completed a residency in surgery, **Dr. Edwin R. Eaton** has opened an office for the practice of surgery at 205 Hume Mansur Building, in Indianapolis. A graduate of the Indiana University School of Medicine in 1940, Doctor Eaton spent forty-three months in the Army.

A 1942 graduate of Indiana University School of Medicine, **Dr. Jack M. Lockhart** has established an office for the practice of internal medicine in Connersville. He recently completed a residency, following two years in the Army.

Dr. Bernard R. Hall, formerly of Indianapolis, has established an office for the practice of obstetrics and gynecology in Logansport. Doctor Hall spent more than four years in the Army.

Dr. Karl C. Kohlstaedt has opened an office for the general practice of medicine at 3660 West 16th Street, in Indianapolis.

After recently having completed training at the Menninger Foundation, in Topeka, Kansas, **Dr. Hilbert DeLawter**, formerly of Indianapolis, is now located at the Haven Sanitarium at Rochester, Michigan.

Dr. Morris C. Thomas, formerly of Indianapolis, was recently transferred to the VA Tuberculosis Hospital at Waukesha, Wisconsin.

Dr. Frederic W. Brown is now associated with Dr. Wayne R. Glock in the practice of orthopedics at 335 Lincoln Bank Tower in Fort Wayne. A 1940 graduate of the Indiana University School of Medicine, Doctor Brown has just completed a three year orthopedic residency at the Indiana University Medical Center. He is an Army Air Force veteran of five years service.

Dr. Clarence D. Benedict has become associated in the practice of medicine with Dr. H. G. Erwin at LaGrange. Doctor Benedict is a graduate of Indiana University School of Medicine, and recently completed a residency at the Percy Jones General Hospital at Battle Creek, Michigan.

Dr. Jack Turner became associated with his father, Dr. H. B. Turner, in the practice of medicine in Bloomfield on October first. Dr. Jack Turner graduated from the University of Louisville School of Medicine in 1946, and interned at St. Mary and Elizabeth Hospital in Louisville for two years.

Dr. Arthur N. Jay, of Indianapolis, has been appointed chairman of the Registration Committee for the national convention of the American Academy of General Practice, which will be held March 7, 8 and 9, 1949, at the Netherland Plaza in Cincinnati.

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Hospital Boards, Medical Societies, with the assistance of their local civic leaders and organizations—are making possible enrollment in these plans for entire communities. Through this means group and non-group employed, including the retired residents of a local community, are enrolled from 60% to 85% strong.

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You can do much to help get such a program under way—it will help you—your community hospital—and the health of your local community! For what you can do to help write PUBLIC RELATIONS DEPARTMENT, Jas. A. Waggener, Director—and information will be furnished promptly.

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Dr. Robert A. Switzer, a 1942 graduate of the Indiana University School of Medicine, is now associated with the State Sanatorium in Oakdale, Iowa, as pathologist and chief of laboratory services. Doctor Switzer is a veteran of two years' service in the Army, and recently completed a residency in pathology at Indianapolis Methodist Hospital.

Formerly of Indianapolis, **Dr. Richard Schug** recently moved to Long Beach, California, where he is associated with the Boyd Foundation.

A 1944 graduate of Indiana University School of Medicine, **Dr. Robert F. Kimbrough**, of Indianapolis, recently began a fellowship in orthopedics at the Mayo Clinic.

Dr. Russell K. Horsman, formerly with the Veterans Administration Hospital in Indianapolis, is now located with a VA hospital in Legion, Texas. He is a 1939 graduate of the Indiana University School of Medicine.

Dr. Caroline M. Goodwin, of Indianapolis, was recently elected chairman of the Citizens Child Welfare Study Committee.

Announcement has been made recently of the opening of an office at 3120 N. Meridian Street, in Indianapolis, by **Dr. J. H. Jewett**, internal medicine, **Dr. Howard L. Kahn**, obstetrics and gynecology, and **Dr. Alexander J. Kahn**, pediatrics. A 1942 graduate of Indiana University School of Medicine, Doctor Jewett is a veteran of World War II, having spent 39 months in the Army, eighteen months of which were spent overseas with the 172nd General Hospital. He served his internship at the Indiana University Medical Center, and completed two years of postgraduate training at the Indianapolis Veterans Hospital. Dr. Howard L. Kahn is a 1939 graduate of Indiana University Medical School, and he spent two years internship at Indianapolis General Hospital, and a three-year residency in Chicago Lying-In Hospital. He was in service for more than three years, 18 months of which were overseas. Dr. Alexander Kahn is a 1942 graduate of Indiana University School of Medicine, and he interned at the Medical Center, and completed a two-year residency at Riley Hospital. He is also an Army veteran of three years' service, two of which were spent overseas.

Dr. J. R. S. Himebaugh has returned to Indiana from Burlington, Iowa, where he was in general practice. He has opened an office at 507 Sherman Drive in Indianapolis. He is a 1942 graduate of the Indiana University School of Medicine.

Dr. Norman R. Cook, formerly of Indianapolis, has opened an office for the practice of psychiatry in Richmond. Doctor Cook was recently released from the service, after serving in the Percy Jones General Hospital, at Battle Creek, Michigan.

VAN METER PRIZE AWARD

The American Goiter Association again offers the Van Meter Prize Award of Three Hundred Dollars and two honorable mentions for the best essays submitted concerning original work on problems related to the thyroid gland. The award will be made at the annual meeting of the association which will be held in the Hotel Loraine, in Madison, Wisconsin, May 26, 27, and 28, 1949, providing essays of sufficient merit are presented in competition.

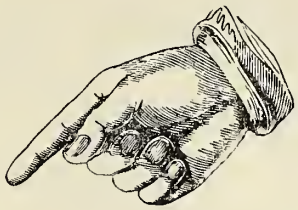
The competing essays may cover either clinical or research investigations; should not exceed three thousand words in length; must be presented in English; and a typewritten double spaced copy sent to the Corresponding Secretary, Dr. T. C. Davison, 207 Doctors Building, Atlanta 3, Georgia, not later than March 15th, 1949.

NEW FIFTY YEAR CLUB MEMBERS

Thirty-six physicians became members of the "Fifty Year Club" at the annual session of the Indiana State Medical Association last month. They received their pins and certificates of distinction at the convention banquet on Thursday night, October 28.

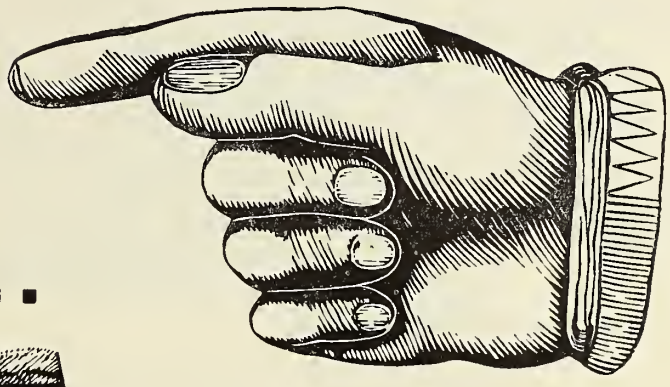
They were: B. W. Rhamy, Fort Wayne; James K. Hawes and Elmer U. Wood, Columbus; John A. Little, Evanston, Illinois; Milton B. Stewart, Logansport; Harry H. Ward, Coalmont; Clarence C. Hill, Frankfort; Charles B. Kern, Richmond; H. M. Arthur, Hazelton; William H. Larrabee, New Palestine; Oscar H. Wiseheart, North Salem; D. L. Perrin, Underwood; Richard H. Fox, Bicknell; Edward A. Brown, Fred L. Hosman, William F. King, John L. Larway, Daniel W. Layman, Lillie C. Lowder, John W. Norrel and James B. Stalker, (deceased) all of Indianapolis; Jon N. Kelly, La-Porte; S. F. Teaford, Paoli; Charles F. Pectol, Spencer; Samuel B. Montgomery, Cynthiana; Walter R. Hutcheson, Greencastle; Stanley A. Clark and William G. Wegner of South Bend; Laura M. Hester, Scottsburg; Herbert F. Bland, Fairbanks; William H. Field, John G. Huber and Samuel R. Laubscher of Evansville; Clarence R. LaBier and Henry R. Vandivier of Terre Haute, and Philip L. Mull of Louisville, Kentucky.

The total membership of the "Fifty Year Club" is 240. Physicians who have practiced medicine for fifty years are recognized by the state association upon nomination by the county medical societies of the state. The policy of recognizing these older doctors was established by the Council in 1947.



On every hand...







medical experience points to multivitamin supplementation, accompanying balanced diet, as the best guaranty of adequate vitamin intake. When vitamins are thus directly administered, nutrients essential to the patient's progress are provided with *certainty*, *precision* and *economy*. For prophylaxis and for therapy, Upjohn prescription vitamins are available in a range of potencies and formulas filling the practical requirements of physicians and surgeons.



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The American College of Physicians will conduct its 30th Annual Session at New York, N. Y., March 28 through April 1, 1949. Dr. Franklin M. Hanger, Jr., of New York City is the Chairman for local arrangements and the program of Clinics and Panel Discussions. The President of the College, Dr. Walter W. Palmer, Director of The Public Health Research Institute of the City of New York, Inc., and Professor Emeritus, Columbia University College of Physicians and Surgeons, are in charge of the program of morning lectures and afternoon general sessions.

The first Annual Scientific Assembly of the American Academy of General Practice will be held March 7, 8 and 9, 1949, in Cincinnati. The state chapters of the Academy in Indiana, Ohio and Kentucky will act as joint hosts for the meeting, which will be held in the Netherland Plaza Hotel. Requests for hotel accommodations should be addressed to Mr. J. S. Turner, Cincinnati Convention Bureau, Dixie Terminal Building, Cincinnati 2.

CHILDREN'S BUREAU ADVISORY COMMITTEE

An Advisory Committee to the United States Children's Bureau was formed in Washington, D.C., recently, to advise the Bureau on matters of public policy affecting the promotion of better health for mothers and children. Members include representatives of medical, nursing, hospital, dental, medical social work, physiotherapy, and dietetic associations; representatives of voluntary health agencies, leaders in labor, farm, women's and veterans groups; and specialists from graduate schools in medicine and allied sciences.

The Children's Bureau is a unit in the Social Security Administration, Federal Security Agency, and is responsible for administering the $18,500,000 grants which Congress makes available each year to the states to extend and improve their maternal and child health services, and crippled children services.

LA FAYETTE POSTGRADUATE COURSE COMPLETED

A four-year postgraduate course in medicine, which was under supervision of the Indiana University School of Medicine, was completed in Lafayette recently. Certificates were presented by Dr. Willis D. Gatch to sixty physicians for completion of the course at a homecoming celebration at St. Elizabeth Hospital. Twenty-four members of the group took the written examinations given by the staff of the Indiana University School of Medicine. Doctor Gatch, former dean of the medical school, described the course as unique in the nation, and Dr. John Van Nuys, present dean, reported that many requests have been received from other cities throughout the state for aid in setting up similar postgraduate courses.

WARNING RE C. B. KENDALL CO. DRUGS

The Federal Security Agency's Food and Drug Administration warns physicians and dentists that certain codes of procaine hydrochloride solution manufactured by C. B. Kendall Company, Indianapolis, caused severe necrotic damage upon injection. The facts came to light only recently when the American Medical Association informed the Food and Drug Administration that a physician reported injuries from a batch of the solution coded 24830.

This code was placed in distribution in February 1948. C. B. Kendall Company determined, following reports of untoward reactions, that the solution is highly acid, possessing a pH of about 1. The company attempted to recall the lot by a letter dated June 3, addressed to each purchaser of the vials, which directed their return, and by recall efforts of its own salesmen. This recall program has not been completely effective.

The Food and Drug Administration has just learned that another batch of the firm's procaine hydrochloride solution, coded 64712, has caused several alleged necrotic reactions. The pH of a vial of this lot was found to be 2.9.

Pharmacological work being performed by the Administration indicates that these two products are dangerous and should not be used. They have been distributed in the area from Florida to Wisconsin and from West Virginia to Texas.

The C. B. Kendall Company has distributed several other lots of injection drugs which possessed a pH of 3.0 or less. Of these the firm has voluntarily recalled the following products on which complaints have been received:

Vitamin B Complex Stronger—Lot No. 54843

Vitamin B Complex—Lot No. 44832

Pentabexin—Lot Nos. 44823 and 54837

Thiadexin—Lot Nos. 34808, 44817, and 64842.

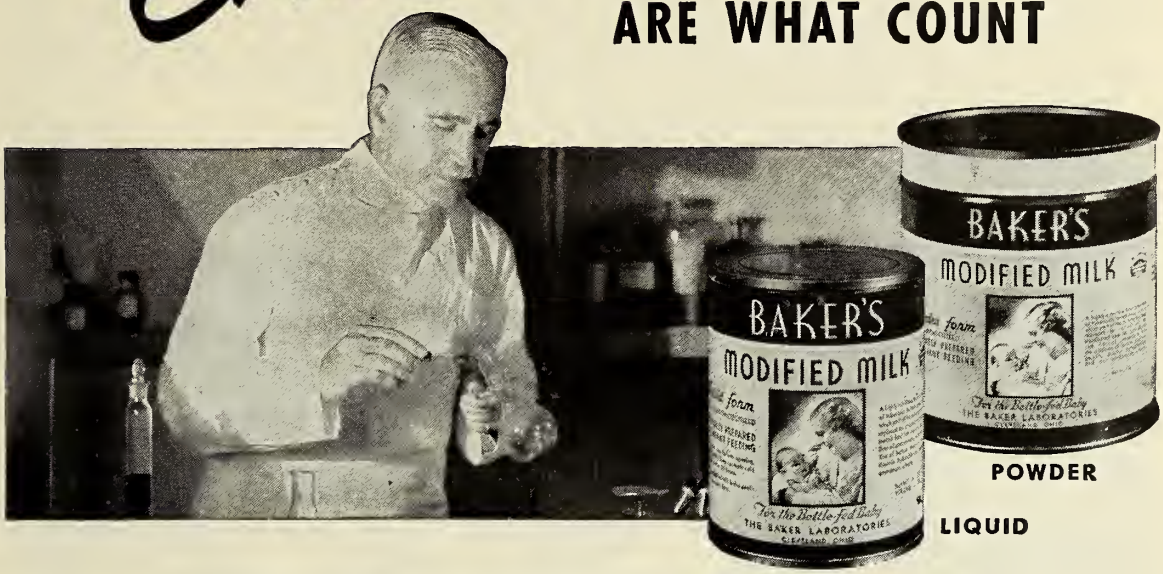
Also the following injection products of C. B. Kendall Company have shown low pH values as indicated:

Product	Lot Number	pH
Vitamin B Complex Stronger	64844	2.9
Vitamin B Complex	54811	2.8
Thiamine Hydrochloride	34817	2.6
Thiamine Hydrochloride	74806	2.9
Pyridoxine Hydrochloride	74725	2.7
Pentabexin	64812	3.0
Procaine Hydrochloride	74871	3.0

The above facts which have been obtained to date require the issuance of this notice to physicians even though the investigation has not been completed.

The Council on Pharmacy and Chemistry of the American Medical Association is assisting in the distribution of this notice through its facilities for communicating to hospitals and physicians.

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● A complete milk diet that closely conforms to human milk . . . a nutritious food for infants that may be used either complemental to or entirely in place of human milk . . . well tolerated by both premature and full-term infants . . . a food that may be used from birth until the end of the bottle feeding period—without changing the formula . . . a diet that means a well-nourished, happy baby.

These are "end results" of the years of research back of Baker's Modified Milk.

What the attainment of these results means to doctors is attested by the steadily increasing use of Baker's Modified Milk, which is advertised only to the medical profession. More and more doctors are prescribing Baker's Modified Milk because they find Baker's produces desired results with less trouble in most cases of infant feeding . . . that no change in dilution is needed as the baby grows older (just increase the quantity of feeding) . . . and the possibility of errors—always present when formulas are prepared in the home—is avoided.

To prepare Baker's for feeding merely dilute it to the prescribed strength with water, previously boiled. Baker's is available in both powder and liquid forms. Formulas made from liquid Baker's are especially easy to prepare; in some cases, such as the lack of refrigeration in hot weather, or when traveling, the powder form is preferable.

Just leave instructions at the hospital. The obstetrical supervisor will be glad to put your next bottle-fed infant on Baker's Modified Milk.

● Baker's Modified Milk is made from tuberculin-tested cows' milk in which most of the fat has been replaced by animal and vegetable oils with the addition of lactose, dextrose, gelatin, iron ammonium citrate, vitamins A, B1 and D. Not less than 800 units of vitamin D per quart.

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"DIABETES WEEK" WILL BE OBSERVED IN DECEMBER

The week of December 6-12, 1948, has been designated as "Diabetes Week" by the American Diabetes Association, Inc. Dr. Franklin B. Peck of Indianapolis is a member of the Committee on Diabetes Detection of the association.

In a statement addressed to "the physicians of America," the association said, in part:

"The finding of the million unknown diabetics in this country poses a direct challenge to the American doctor. It is within his power to accomplish this feat. The existence of a million undiscovered diabetic patients in the United States has been demonstrated through a series of surveys, the most recent one conducted by the United States Public Health Service. The results of these studies now provide a springboard for organized medicine and a golden opportunity for physicians to seize the initiative *on their own* in this significant phase of public health.

"The American Diabetes Association has planned a campaign to promote the early discovery and prompt treatment of the million undiscovered cases of diabetes. This campaign is unique in professional service for, according to plan, the physician himself will be at the helm. Therefore, the plan cannot be prosecuted, or even started, without the endorsement and support of the entire medical profession through its governing bodies, national, state, county and local medical societies.

"The plan proposed by the association is simple, direct, and sure. Through local diabetes associations, related to the American Diabetes Association and with cooperation of local, county and state medical societies over the United States and Canada, it is planned to carry out blood-sugar screening tests by a new five-minute micro-blood sugar method with simultaneous urinalysis for sugar with attention to the time in relation to the preceding meal. The procedure can be carried out apart from a formal laboratory. The equipment is still in the manufacturers' hands but is to be available within two or three months. The only provision will be that the candidate must name a physician or clinic to which the results of the tests will be mailed for interpretation to the patient. *Under no condition* will a report be sent directly to the examinee. The effort is to bring the unknown diabetic patient under his own physician's care. There will be no statistics; no red tape.

"Simultaneously, the American Diabetes Association will carry on an intensive educational campaign directed first toward doctors' postgraduate courses. It will be directed toward the layman by radio, newspapers and other publicity channels in addition to the *A.D.A. Forecast*, the association's bi-monthly magazine which brings to the diabetic patient homespun articles on the disease by eminent authorities in the field. At the same time the association will place in the hands of physicians over the country an authentic "Handbook of Therapy." Containing the most up-to-date information available, the handbook will assist the physician in treating diabetic patients.

"The week of December 6-12, immediately following the interim meeting of the American Medical Association, will be proclaimed as 'Diabetes Week.' This will be the formal beginning, the kick-off, of the Association's Diabetes Detection Drive. From this start, the program will continue on a long-term basis."

BRAYTON CLINICOPATHOLOGICAL CONFERENCE

Under the auspices of The Alembert Winthrop Brayton Skin and Cancer Foundation, the Department of Dermato-Syphilology at Indianapolis General Hospital and Health Center has arranged a program of monthly guest-conducted clinicopathological conferences. These meetings were planned originally to create an opportunity for student sections, interns, residents and visitants serving in that department to hear case discussions by clinicians other than members of the department. However, these conferences will be open to any physician who may wish to attend. This is but one of the general educational projects in dermatosyphilology which the Brayton Foundation will foster within the state.

On Tuesday, November 16, the guest speaker will be Dr. Harold N. Cole, Professor of Dermato-Syphilology of Western Reserve University, of Cleveland. This will be a dinner meeting, and Doctor Cole's address will deal with "The Antiquity of Syphilis, With Some Observations on its Treatment Through the Ages."

On Wednesday, November 17, from 8:30 to 12:00 a.m., Doctor Cole will be moderator at a viewing of clinical cases at the Health Center. This will be followed by a luncheon.

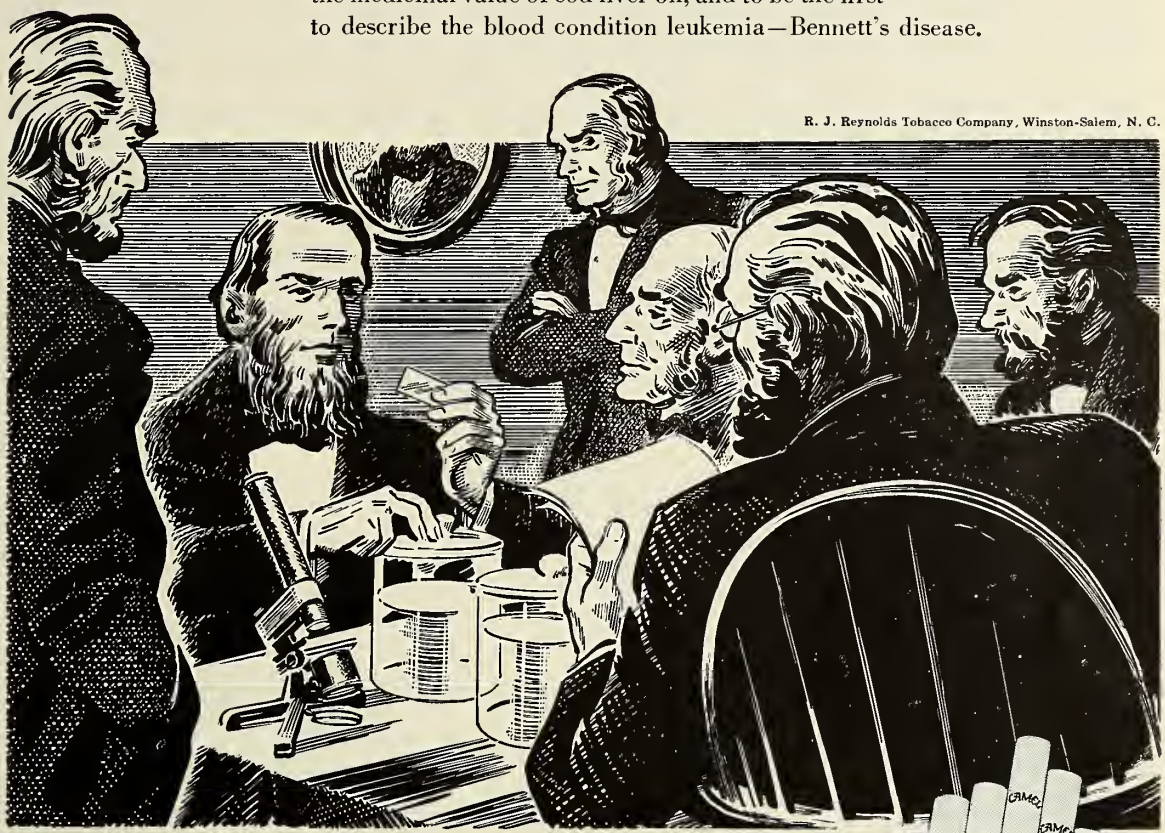
Announcements of conferences for following months will be made in future issues of THE JOURNAL.

Due to the need for expansion of the teaching of postgraduate work in the basic sciences, the expansion being required by the increased demand for postgraduate work by residents and graduate physicians, Dr. Edwin N. Kime, who since July 1, 1940, has been head of the department of anatomy at both the Indianapolis and Bloomington campuses of the Indiana University School of Medicine, has transferred his work to the Indianapolis campus. Dr. Kime's work on the Bloomington campus will be carried on by Professor R. L. Webb who will serve as acting chairman on that campus. Doctor Kime had practiced medicine for twenty-five years in Indianapolis prior to assuming the work as head of the department of anatomy of both campuses in July 1, 1940.

Experience is the Best Teacher

JOHN HUGHES BENNETT (1812-1875) proved it in histology

Bennett's experiences, gained by linking physiology with clinical medicine, led him to institute the practical study of histology, to recognize the medicinal value of cod liver oil, and to be the first to describe the blood condition leukemia—Bennett's disease.



R. J. Reynolds Tobacco Company, Winston-Salem, N. C.

Experience is the best teacher in cigarettes, too!



YES! Millions of smokers who have tried and compared many different brands of cigarettes found from experience that cool, full-flavored Camels suit them best.

Try Camels! See how the full, rich flavor of Camel's choice, properly aged and expertly blended tobaccos pleases *your* taste. See if Camel's cool mildness isn't mighty welcome to your throat.

Yes! Let your taste and throat tell you why, with millions of smokers who have tried and compared, Camels are the "choice of experience."



According to a Nationwide survey:

More Doctors Smoke CAMELS

than any other cigarette

In a nationwide survey by three independent research organizations. 113,597 doctors were asked to name the cigarette they smoked. More doctors named Camel than any other brand.

ARTHRITIS AND RHEUMATISM FOUNDATION

A new organization, The Arthritis and Rheumatism Foundation, has been organized to promote a united nation-wide attack on arthritis and other rheumatic diseases, W. Paul Holbrook, M.D., Tucson, Arizona, president of the foundation, has announced.

The new foundation is sponsored by the American Rheumatism Association in cooperation with the National Arthritis Research Foundation, The Detroit Fund for Crippling Diseases, and others interested in bringing about a unity of effort in combatting one of the biggest problems confronting the medical profession—the seven and one-half million persons in the United States afflicted with arthritis or related disorders. Representatives of the three organizations are included in the seventeen prominent physicians and business men on the board of directors of the new foundation, which has been incorporated in the state of New York.

Appointment of ten nationally known physicians and scientists to the Medical and Scientific Committee of the recently organized Arthritis and Rheumatism Foundation has been announced by Dr. Holbrook.

The committee will guide the medical policies and activities of the foundation in its attack on arthritis or related disorders.

Functions of the committee will include the development of programs which can be undertaken by the foundation's 38 local chapters which are being organized throughout the country, and advising and guiding the chapters in carrying them out.

It will establish and promote medical standards, particularly with regard to rheumatism clinics, which will guide the chapters in their work in their localities for the development of better clinical facilities for the care of rheumatism patients. It also will establish standards and goals for medical education in the field of rheumatism on various levels such as:

Undergraduate medical education, graduate education aimed at proficiency in clinical care, and suggested plans for rheumatism educational programs for the general practitioner, to be carried out by chapters in cooperation with state and county medical societies.

The committee also will be charged with the responsibility of determining whether or not other chapter activities are sound from the medical standpoint and in keeping with the policies of the foundation.

Members of the committee are: Dr. Guy A. Caldwell, New Orleans, professor of clinical orthopedics, Tulane University of Louisiana School of Medicine; Dr. Russell L. Cecil, New York, professor of clinical medicine, Cornell University Medical College; Dr. Robley D. Evans, Boston, professor of physics, Massachusetts Institute of Technology; Dr. Morris Fishbein, Chicago, editor, *The Journal of the American Medical Association*; Dr. Philip S. Hench, Rochester, Minnesota, professor of medicine (Mayo Foundation), University of Minnesota Medical School; Dr. Andrew C. Ivy, Chicago, vice-president in charge of the Chicago Professional Colleges, University of Illinois; Dr. Karl F. Meyer, San Francisco, director, the Hooper Foundation, University of California; Dr. Currier McEwen, dean, New York University College of Medicine, New York; Dr. Walter W. Palmer, New York, director, William Hallock Park Laboratories, Public Health Research Institute of the City of New York, Inc.; and Dr. Howard A. Rusk, New York, professor of rehabilitation, New York University College of Medicine.

THE INDIANA RHEUMATISM ASSOCIATION

A society for the study of rheumatic diseases has recently been organized in Indianapolis. The purpose of this organization is to stimulate interest in the rheumatic diseases among physicians and laymen.

At the inaugural meeting on September 20, 1948, the following officers were elected: Dr. James S. Browning, President; Dr. Wm. M. Dugan, Vice-President; Dr. John S. Schechter, Secretary-Treasurer.

Charter Members of the organization include: Doctors Raymond M. Rice, W. Donald Close, Joe H. Jewitt, James C. Katterjohn, Palmer O. Eicher, Donald Casely, and Fritz Levine.

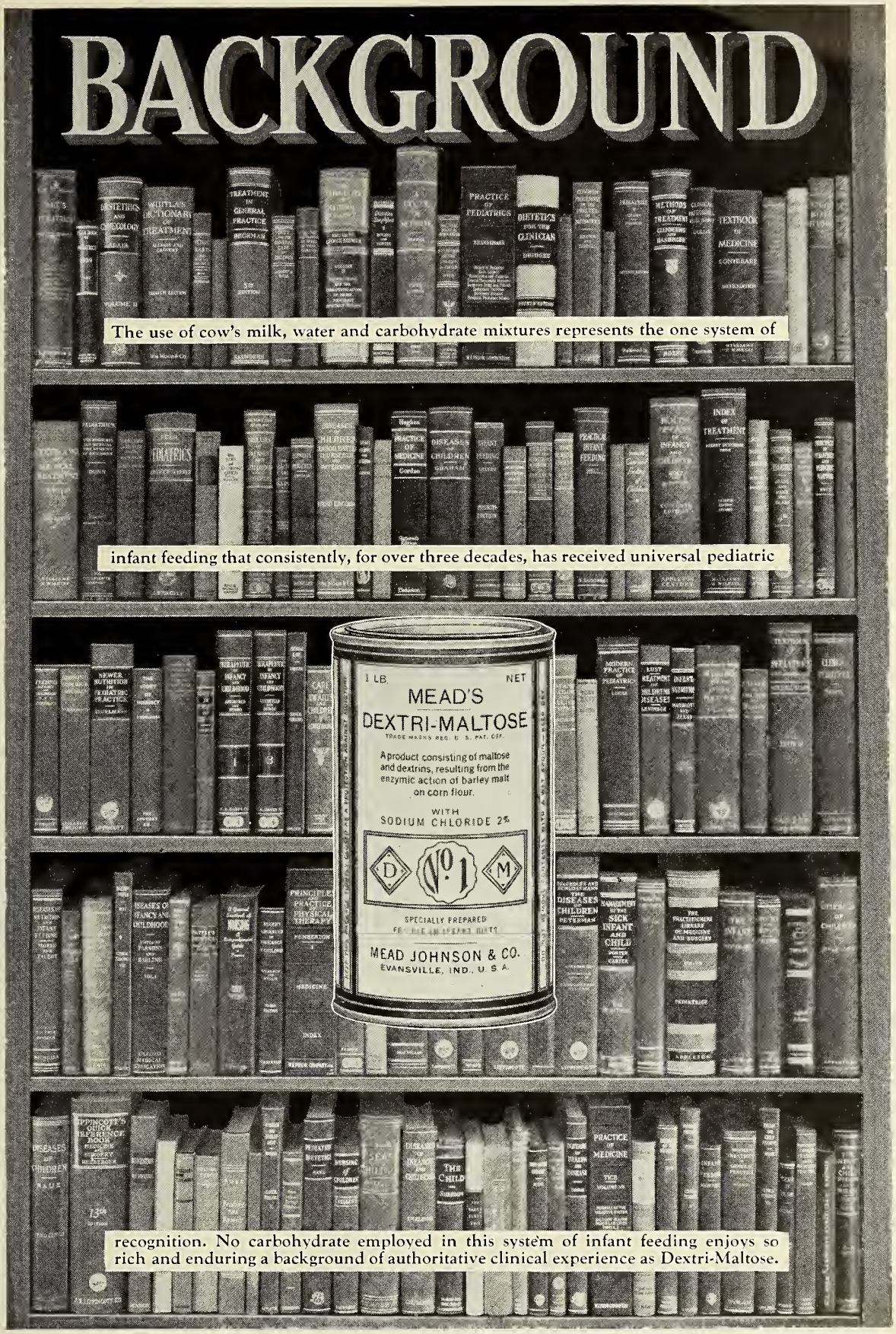
Physicians of the State of Indiana having a particular interest in rheumatic diseases are eligible for membership, and are invited to make application through any of the society's members. Scientific meetings and later affiliation with the American Rheumatism Association are anticipated.

NATIONAL HEALTH ASSEMBLY STEERING COMMITTEE APPOINTED

The National Assembly was incorporated prior to the holding of the assembly in early May. This corporation continues as a living organism. It is the hope of Federal Security Administrator Ewing that the recommendations of the 14 sections of the National Health Assembly will be carried out through the vehicle of an NHA Steering Committee and that this committee will serve on a permanent voluntary basis.

To this end, Ewing has appointed a steering committee composed of: Nelson Cruikshank, A. F. of L.; Graham Davis, American Hospital Association; Miss Katherine Densford, American Nurses Association; Dr. Vlado A. Getting, Association of State and Territorial Health Officers; Mrs. Mary Lasker; Mrs. Eugene Meyer; Hon. Jerry Voorhis, Cooperative League of USA, and George F. Lull, Secretary and General Manager of the A.M.A.

The steering committee acts for the NHA Executive Committee. A.M.A. President Dr. R. L. Sensenich, A.M.A. Past President Dr. Edward L. Bortz, and Dr. Lull will look out for the interests of the American Medical Association on this executive committee.


BACKGROUND
The use of cow's milk, water and carbohydrate mixtures represents the one system of
infant feeding that consistently, for over three decades, has received universal pediatric
1 LB. NET
MEAD'S
DEXTRI-MALTOSE
A product consisting of maltose and dextrins, resulting from the enzymic action of barley malt on corn flour.
WITH SODIUM CHLORIDE 2%
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SPECIALLY PREPARED
MEAD JOHNSON & CO.
EVANSVILLE, IND., U. S. A.
recognition. No carbohydrate employed in this system of infant feeding enjoys so
rich and enduring a background of authoritative clinical experience as Dextri-Maltose.

DOCTORS BORTZ AND SARGENT APPOINTED TO MEDICAL ADVISORY COMMITTEE

Dr. Edward L. Bortz, Philadelphia, past president of the American Medical Association, and Dr. James C. Sargent, Milwaukee, chairman of the A.M.A. Council on National Emergency Medical Service, has been appointed to the medical advisory committee of the National Security Resources Board.

This board, created in 1947, is a permanent civilian agency of the government and reports directly to the President. The function of the board is to advise the President concerning the coordination of military, industrial, and civilian mobilization.

The medical advisory committee is made up of five physicians and one dentist. Besides Drs. Bortz and Sargent, the committee is composed of Drs. William P. Shepard, Metropolitan Life Insurance Company, San Francisco; A. C. Bachmeyer, University of Chicago, Chicago; Michael E. DeBakey, Louisiana State University School of Medicine, New Orleans; and Percy T. Phillips, New York, secretary of the New York Dental Society and active in the American Dental Association.

Chairman Arthur M. Hill of the National Security Resources Board appointed the committee to advise on health and medical aspects of work of the board.

NURSES INTRODUCE NEW BILL

The Indiana State Nurses' Association is introducing a bill in the 1949 General Assembly governing the registration and examination of professional and practical nurses. The bill is designed to replace the present law with provisions to meet the changing needs in nursing services and nursing education more effectively.

The salient features of the bill are:

1. The age requirement for state board examinations for professional nurses is lowered from 21 to 20 years, thereby making it possible for students to enter schools of nursing at 17 instead of 18 years of age.
2. The age requirement for state board examinations for practical nurses is lowered from 19 to 18 years of age.
3. There are improved provisions to facilitate the registration of out-of-state nurses.
4. The new bill makes provision for an inactive list of registrants. This means that nurses who are not practicing for family or health reasons may notify the board and be placed on an inactive list until such time as they wish to resume practice. Nurses on the inactive list would not be required to pay the annual registration fee.

INDIANA UNIVERSITY NEWS NOTES

Admission of 21 additional students to the Indiana University School of Medicine, bringing the freshman class to a total of 150 members, was announced recently by Dean John D. Van Nuys.

An expansion of medical training by the University recently was approved by Governor Ralph F. Gates and the State Budget Committee as a means of relieving a reported critical medical situation in the state. To increase the medical school's faculty and staff the Budget Committee voted a supplementary appropriation of $116,500 for the current fiscal year.

The Indiana University medical school, which has ranked for several years as fifth largest of the country's approved schools, will move farther up the list as a result of the increased admissions. As contrasted with Indiana's entering class of 150, admissions this fall at other middle western state university medical schools have been as follows: Illinois, 160; Michigan, 150; Iowa, 90; Ohio, 75, and Minnesota and Wisconsin, each less than 100.

The newly admitted students were announced by Dean Van Nuys as follows: James E. Hynes and William R. Wise, Indianapolis; Donald J. Parrot and Solomon A. Puntillo, East Chicago; Ray T. Belding, Jr., Edwin D. Kennedy, Bloomington; Willis T. Coombs, Scottsburg; Max E. Freeman, Kokomo; Marian K. Hiner, Martinsville; Howard W. Koch, Evansville; Joseph R. McCarty, Princeton; Melvin H. McCoy, Richland; William J. Mankin, Terre Haute; Harold O. Murphy, Franklin; Robert D. Murphy, South Bend; Lawrence H. Pifer, Jasonville; Robert E. Rose, Linton; Dale Stoops, New Castle; Robert L. Tindall, Greenfield; Ali Vafi, Istanbul, Turkey; Paul S. Yocum, Jr., Gary.

WE NEED TO BE HUMBLE

In all aspects of medicine we need to be humble. We can be proud of what has been accomplished . . . so long as it does not blind us to the fact that most progress has occurred in relation to acute diseases. Despite great advances in the control of bacterial diseases, and however great such advances may be in the future, medical science must always go forward. It is remarkable . . . that no sooner is the cure or control of one disease accomplished than new problems appear to arise. . . . At one time it seemed that gonorrhea could be almost controlled with the sulphonamides, but nowadays it is recognized that a large proportion of cases, many more than hitherto, are sulphonamide-resistant. Is this an example of the aphorism "Make haste to use a new remedy before it is too late," or is it that bacteria are really capable of rapid adaptation? The latter is probably the truth. In due course penicillin-resistant staphylococci may become common, whereupon the whole search must begin again. Likewise with streptomycin, to which resistance appears to be quickly established.—Sir Lioneel Whitby, M.D., *British Medical Journal*, July 3, 1948.

Theophylline Therapy
...DOSAGE BARRIER REMOVED

ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

SYNOPHYLATE
Trademark

Brand of
Theophylline-Sodium Glycinate

Soluble theophylline compound . . . better tolerated than other available theophylline compounds . . . permits doses as high as 60 grains (equivalent to 30 grains Theophylline U. S. P.) to be given daily, with low incidence of nausea or other untoward effects. Clinical tests confirm safety, effectiveness.[1]

Specify SYNOPHYLATE* wherever theophylline is indicated: bronchial asthma, either allergic or secondary to emphysema; Cheyne-Stokes respiration; as a diuretic in congestive heart failure; paroxysmal dyspnea or pulmonary edema of cardiac origin.

3 Convenient Dosage Forms:

***Tablets* SYNOPHYLATE.** Each tablet (uncoated) contains 0.33 Gm. (5 grains), equivalent to 0.16 Gm. (2½ grains) Theophylline U. S. P. Bottles of 100, 500, and 1,000 tablets. Tablets of 0.165 Gm. (2½ grains) also available.

***Syrup* SYNOPHYLATE.** Each teaspoonful contains 0.33 Gm. (5 grains) SYNOPHYLATE, equivalent to 0.16 Gm. (2½ grains) Theophylline U.S.P. Bottles containing 1 pt. and 1 gal.

***Suppositories* SYNOPHYLATE,** rectal. Each suppository contains 0.78 Gm. (12 grains), equivalent to 0.39 Gm. (6 grains) Theophylline U. S. P. Cartons of 12 foil-wrapped suppositories.

1. Paul, W. D., and Montgomery, A. E.: J. Iowa State M. Soc. 38: 237 (June) 1948.

*Trademark of The Central Pharmacal Co.

THE CENTRAL PHARMACAL CO.
Pharmaceutical Progress Since 1904

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Established 1898 for

NEUROPSYCHIATRIC DISORDERS

Clinical Laboratory
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Diplomates of American Board of:
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Internal Medicine
Wendell A. Shullenberger, M.D.

Phone CH. 9120 1820 E. Tenth Street
Indianapolis, Indiana

Deaths

Albert W. Goodale, M.D., who had practiced medicine in Orland for more than thirty years, died on September 10 at the home of a daughter in Los Angeles, California. He was seventy-five years of age. Doctor Goodale was a graduate of the University of Buffalo School of Medicine, Buffalo, New York, in 1907.

George L. Karras, M.D., of Gary, died suddenly on September 30. He was forty-nine years of age, and was a graduate of the Dalhousie University Faculty of Medicine, in Halifax, Nova Scotia, in 1926.

Frederick Bryan Wishard, M.D., of Anderson, medical director of the Delco-Remy Division for more than twenty-four years, died suddenly on September 23. He was fifty-four years of age. Doctor Wishard was widely known in industrial medical circles. He graduated from Indiana University School of Medicine in 1923, and specialized in industrial medicine and surgery. He was a past president of the Eighth District Medical Society, and was a member of the Madison County Medical Society and the Indiana State Medical Association, and was a Fellow of the American Medical Association.

Chester Elwood Stephenson, M.D., retired physician of Indianapolis, died September 22 at Franklin, at the age of seventy-one. He was a graduate of the Medical College of Indiana, in Indianapolis, in 1903.

Henry R. Alburger, M.D., of Indianapolis, died on October 7, at the age of seventy-four. A graduate of the University of Pennsylvania School of Medicine, in Philadelphia, in 1902, Doctor Alburger came to Indiana from Philadelphia in 1905, and was head of the pathology department at Indiana University School of Medicine for many years. He was a member of the Indianapolis (Marion County) Medical Society and the Indiana State Medical Association, and was a Fellow of the American Medical Association.

Russell G. Zimmerman, M.D., of Berne, died on September 24, in Lima, Ohio. He was forty-five years of age. A graduate of Indiana University School of Medicine in 1932, Doctor Zimmerman had practiced in Berne for the past eight years. He was a member of the Adams County Medical Society, the Indiana State Medical Association, and the American Medical Association.

Society Reports

INDIANA STATE MEDICAL ASSOCIATION

EXECUTIVE COMMITTEE

September 26, 1948

Roll call showed the following present: C. H. McCaskey, M.D., chairman; Walter L. Portteus, M.D.; Cleon A. Nafe, M.D.; A. P. Hauss, M.D.; Alfred Ellison, M.D.

Frank B. Ramsey, M.D., associate editor of THE JOURNAL; A. F. Weyerbacher, M.D., treasurer; Albert Stump, attorney, and Ray E. Smith, executive secretary.

Statements of receipts and expenditures for August for the association and THE JOURNAL were approved.

Membership Report

Number of members September 25, 1948 3,638*
Number of members September 25, 1947 3,574
Gain over last year 64
Number of members Dec. 31, 1947 3,618
* Includes 55 in military service (gratis), 179 honorary members.

Treasurer's Office

Pension trust plan. The pension trust plan for headquarters office employees was discussed by the treasurer but no action was taken.

1948 Annual Session, Indianapolis, October 26, 27 and 28, 1948.

Annual dinner. Tables are to be reserved for the ex-presidents and their wives, the councilors and their wives, the Auxiliary officers and their husbands, and the wives of those seated at the speakers' table. On motion of Drs. Ellison and Portteus, Dr. Charles N. Combs is to be asked to take charge of these arrangements.

A table is to be reserved for the new members of the Fifty-year Club and their wives.

The committee approved the following wording

HOME LAWN MINERAL SPRINGS

One of the three best known watering places in America



We all recognize the fact that many people who are engaged in strenuous, social, political and business activities require a time out now and then for complete relaxation.

Here at Home Lawn you may enjoy a health vacation under the supervision of our Medical Department. The joy of a mineral bath, given by a trained attendant, is something to be remembered.

Complete diagnostic equipment, department of Dietetics, Laboratory and X-ray.

HOME LAWN MINERAL SPRINGS

MARTINSVILLE, INDIANA

Information upon request
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Martinsville Mineral Springs
Same ownership. Lower rates.
W. E. KENNEDY, PRESIDENT

Medical Staff
M. C. Pitkin, M.D., Director
J. H. Grimes, M.D., Associate

for the plate on the painting to be presented to the "General Practitioner of the Year":

General Practitioner Award
Presented to
John D. Doe, M.D.
By the
Indiana State Medical Association
1948

Legislative Matters

National

Copy of a letter written by the Democratic candidate for Congress from the Eleventh District to the Indianapolis Chamber of Commerce was referred to the Committee on Public Policy and Legislation and the Indianapolis Medical Society.

Organization Matters

"M.D." license plates. On motion of Drs. Nafe and Portteus the question of continuing the use of "M.D." license plates was referred to the Council. It is the opinion of the Executive Committee that the use of the plates is poor public relations for the profession.

National Society for Medical Research. On motion of Drs. Ellison and Nafe, a contribution of $100.00 is to be made to the National Society for Medical Research, Chicago.

Organization of American Medicolegal Congress. The attorney was instructed to write to the director of the Bureau of Legal Medicine and Legislation of the American Medical Association to the effect that the committee believes that the organization of an American Medicolegal Congress would be helpful to medicine.

Resolution passed by the House of Delegates of the American Medical Association pertaining to financial support for state women's auxiliaries was read.

A.M.A. Associate Fellowship. On motion of Drs. Nafe and Ellison, Dr. Henry W. Greist of Monticello was recommended for Associate Fellowship in the A.M.A.

General practitioner of the year. The resolution of the A.M.A. regarding the method for selecting the A.M.A. general practitioner of the year was read.

Membership in Indiana State Conference on Social Work. On motion of Drs. Nafe and Portteus, membership in the Indiana State Conference on Social Work for 1948-1949 was voted.

Membership in Medical Society Executives Conference. Membership in the Medical Society Executives Conference for 1948-1949 was approved, on motion of Drs. Nafe and Ellison.

Inter-professional Health Councils. The executive secretary was directed to write to the secretary of the Indiana Inter-Professional Health Council to the effect that the committee believes that the organization of county health councils is preferable to attempting to organize local inter-professional health councils, and to suggest that the professions which would be represented in a county inter-professional health council become participants in the county health councils proper.

The Journal

Report on advertising:

Increase in September	$ 739.00
No decrease	
Total increase for year	$2,494.44

On motion of Drs. Nafe and Portteus, the committee granted permission to the Union Mutual Life Insurance Company of Portland, Maine, to reprint the article entitled "Loopholes in Disability Insurance," which appeared in the November, 1947, issue of THE JOURNAL of the Indiana State Medical Association, provided the article is used in its entirety and that a proof of how the article is being used is submitted to the attorney of the association for his approval.

On motion of Drs. Ellison and Nafe, a study is to be made of the receipts and expenditures of the medical defense fund with the thought in mind of increasing the fee paid from each membership to the fund and placing a limit on the amount of attorney fees paid in each case.

There being no further business, the committee adjourned to meet again at 6:30 p.m., Monday, October 25, 1948, at the Columbia Club.

COMMITTEE ON PUBLICITY

September 3, 1948

Present: Homer G. Hamer, M.D., chairman; Marlow W. Manion, M.D., and Ray E. Smith, executive secretary.

The following "Hints on Health" releases were approved:

Week of October 11, 1948—"The Family Doctor."
Week of October 18, 1948—"Taking Medicine."

The executive secretary reported releases of the following spot news stories:

August 28, 1948—"Doctor's Day at the Workshop in School and Community Health Education."
August 31, 1948—"Nursing School Scholarships Awarded to Three Girls."
September 2, 1948—"Blood Pressure Readings Taken at State Fair."

Letter from the Bureau of Health Education, American Medical Association, explaining cost for making special radio transcriptions for state medical associations was read.

The executive secretary was directed to write the Bureau of Health Education about the Conference on School Health Programs for Physicians and School Administrators to be sponsored by the Indiana State Medical Association on September 29, in response to the bureau's request for examples of achievements by medicine which might be incorporated in a new radio series, "Doctors Today."

The executive secretary reported that the committee's radio time on Saturday, August 21, over WFBM was used by the Indiana Hospital Council.



North Shore Health Resort

Winnetka, Illinois

on the Shores of Lake Michigan

A completely equipped sanitarium for the care of
nervous and mental disorders, alcoholism and drug addiction
offering all forms of treatment, including electric shock.

SAMUEL LIEBMAN, M.S., M.D.
225 Sheridan Road — Medical Director — Phone: Winnetka 211

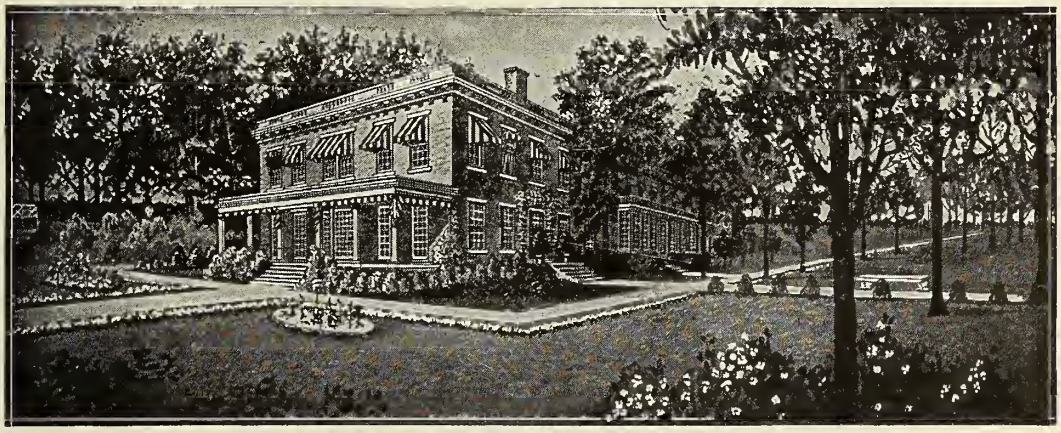
Fully Approved By The American College of Surgeons

ALCOHOLISM
SENILITY
DRUG ADDICTION

A Modern Ethical Sanitarium at Louisville

Established 1904

NERVOUS
AND
MENTAL DISEASES



BEAUTIFUL AND SPACIOUS GROUNDS AFFORD OUTDOOR RELAXATION

Our **ALCOHOLIC** treatment destroys the craving, restores the appetite and sleep, and rebuilds the physical and nervous condition of the patient. Liquors withdrawn gradually; no limit on the amount necessary to prevent or relieve delirium.

MENTAL patients have every comfort that their home affords.

The **DRUG** treatment is one of gradual reduction; it relieves the constipation, restores the appetite and sleep; withdrawal pains are absent. No Hyoscine or rapid withdrawal methods used unless patient desires same.

NERVOUS patients are accepted by us for observation and diagnosis as well as treatment.

Select cases of SENILITY accepted.

Physiotherapy—Clinical Laboratory—X-ray

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Rates and folder on request.

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Highland 2102

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The script used on the broadcast was reviewed by a member of the Executive Committee and the executive secretary in the absence of members of the Committee on Publicity, before it went on the air.

COMMITTEE ON PUBLICITY

September 17, 1948

Present: Homer G. Hamer, M.D., chairman; Marlow W. Manion, M.D.; James O. Ritchey, M.D.; Cleon A. Nafe, M.D., and Ray E. Smith, executive secretary.

The following "Hints on Health" releases were approved:

Week of October 25, 1948—"Lye Poisoning."

Week of November 1, 1948—"Stomach Function."

Two new stories on the Conference on the School Health Program, one for release September 21 and the other for release September 26, were approved.

The following releases for the 1948 annual session were approved:

October 1, 1948—"Mrs. Gates Plans Autumn Party for Wives of Doctors."

October 4, 1948—"Physicians from State Placed on Medical Program."

October 8, 1948—"Top Men in American Medicine Will Address Hoosier Doctors."

COUNCILOR DISTRICT MEETING

SEVENTH DISTRICT

At the fall meeting of the Seventh District Medical Society, which was held at the Johnson County Country Club in Franklin, on September 22, Dr. Malcolm Scamahorn, of Pittsboro, was elected president-elect. He will assume the presidency in 1949. Dr. Don Wood, of Indianapolis, was re-elected secretary, and Mr. Joseph E. Palmer, executive secretary of the Indianapolis Medical Society was placed in a similar capacity for the Seventh District group.

Guest speaker of the evening was Mr. Eugene C. Pulliam, president of Indianapolis Newspapers, Inc. Preceding his address, a scientific meeting was held, with Dr. James O. Ritchey, of Indianapolis, discussing "Diseases of the Liver—Medical or Surgical." His address was discussed by Drs. John H. Warvel, of Indianapolis, and William D. Province, of Franklin.

A golf tournament for the members was held in the afternoon, and a tea was given for the ladies by the Johnson County Woman's Auxiliary. One hundred and thirty-two physicians and their wives attended the meeting. The next meeting will be held in Indianapolis in the spring.

ELEVENTH DISTRICT

Logansport was selected as the place for the spring meeting of the Eleventh Indiana Councilor District Medical Association at the fall meeting held in Kokomo on September 15. The date will be Wednesday, May 18, 1949, with the Cass County Medical Society serving as the host.

Two excellent scientific lectures featured the meeting at Kokomo. Dr. Paul C. Bucy of the Cook County Hospital staff, Chicago, discussed "Management of Head Injuries," and Dr. Harris B. Schumacker, Jr., head of the Department of Surgery, Indiana University School of Medicine, spoke on "The Surgical Treatment of Congenital Heart Disease."

At the business meeting reports were made by Dr. O. G. Brubaker of North Manchester, secretary; Dr. C. S. Black of Warren, councilor, and Dr. E. B. Jewell of Logansport, necrologist. Dr. W. W. Holmes of Logansport assumed the presidency of the district association.

A resolution was adopted urging that the state law on insanity hearings be amended to provide a $10 fee and fifty cents a mile mileage for physicians required to make examinations or to attend hearings. The present fee is $3 a day and ten cents a mile. The resolution was introduced by Dr. F. M. Whisler of Wabash.

The ladies were entertained in the afternoon at the home of Dr. and Mrs. Joe D. Boughman, enjoying a musical tea and radio talk. They joined their husbands for dinner and entertainment at the Masonic Temple in the evening.

LOCAL SOCIETY REPORTS

Bartholomew County Medical Society members were hosts at a dinner meeting on September 29 at the Harrison Lake Country Club in Columbus. The meeting was a get-together with nonprofessional people who are interested in medical service in the community. Guests included wives of the members, members of the Jackson and Jennings county medical societies, and the Mayor of Columbus and his official family. Speaker of the evening was Dr. Donald J. Caseley, medical director of the Indiana University Medical Center.

Boone County Medical Society members held a meeting in Lebanon on September 7. Fifteen members were present at the business meeting.

On September 15 the society held their annual party for their wives, for the nurses at the Witham Memorial Hospital, and for representatives of medical societies in surrounding counties. This was given at the Ulen Country Club.

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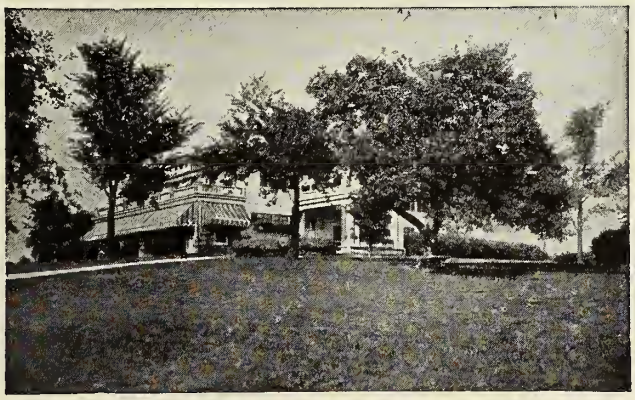
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Greene County Medical Society members met at the Freeman Greene County Hospital in Linton, on September 16. The eighteen members present heard Dr. Bernard Rosenak, of Indianapolis, speak on "History and Treatment of Peptic Ulcer."

Hamilton County Medical Society members met at Forest Park, in Noblesville, on September 14. Dr. Wemple Dodds, of Crawfordsville, spoke on "Blue Cross and Blue Shield Insurance." Eighteen members were in attendance.

Madison County Medical Society members held a meeting on September 30 at the Elwood Country Club, in Elwood. Fifteen members were present. The guest speaker was Dr. T. B. Noble, Jr., of Indianapolis, who spoke on "Crossroads of Medicine."

Montgomery County Medical Society members met in Crawfordsville, on September 16. The guest speaker was Dr. Robert L. Glass, of Indianapolis, whose subject was "The Intervertebral Disc Syndrome." Twenty-nine members were present.

Parke-Vermillion County Medical Society members met at the Vermillion County Hospital, at Clinton, on September 15. Fourteen members were present. Dr. Robert C. Speas, of Terre Haute, spoke on "Common Ear, Nose and Throat Conditions."

St. Joseph County Medical Society members met on September 14 at the Indiana Club, in South Bend. Dr. Louis F. Sandock, of South Bend, spoke on "Bronchiectasis."

Tippecanoe County Medical Society held a meeting on September 14, at the Lincoln Lodge, in Lafayette. Fifty-four members were present, to hear Dr. John Van Nuys, of Indianapolis, speak on "Medical Education as it Confronts Us Today."

Vanderburgh County Medical Society members held a meeting on September 14 at the Hotel McCurdy, in Evansville. Guest speakers were Dr. A. F. Weyerbacher, of Indianapolis, whose subject was "Sterility in the Male," and Dr. Carl Habich, of Indianapolis, who spoke on "Sterility in the Female."

Wells County Medical Society members held their second annual fall Clinical Conference at the Bluffton Country Club on September 15. Seventy-one members and guests were present. Guest speakers included Dr. Fred Adair, of Chicago, Dr. A. L. Hoyne, of Chicago, Dr. Hamlin Mattson, of Minneapolis, Dr. J. A. Bargen, of the Mayo Clinic, Dr. Fred Wishard, of Anderson, and Dr. J. O. Ritchey, of Indianapolis.

Books

Books received are acknowledged in this column, and such acknowledgment must be regarded as a sufficient return for the courtesy of the sender. Selections will be made for more extensive review in the interests of our readers and as space permits. Books listed in this department are not available for lending. Any information concerning them will be supplied on request.

* * *

PREOPERATIVE AND POSTOPERATIVE CARE OF SURGICAL PATIENTS. By Hugh C. Ilgenfritz, M.D., formerly Assistant Professor of Surgery, Louisiana State University School of Medicine, and Visiting Surgeon, Charity Hospital of Louisiana, New Orleans. 898 pages, with 110 illustrations. Cloth. Price $10.00. The C. V. Mosby Co., St. Louis, 1948.

* * *

A-B-C's OF SULFONAMIDE AND ANTIBIOTIC THERAPY. By Perrin H. Long, M.D., Professor of Preventive Medicine, Johns Hopkins University School of Medicine. 231 pages. Fabrikoid. Price $3.50. W. B. Saunders Company, Philadelphia, 1948.

HANDBOOK OF ORTHOPAEDIC SURGERY. By Alfred Rives Shands, Jr., M.D., Medical Director of the Alfred I. duPont Institute of the Nemours Foundation, Wilmington, Delaware, Visiting Professor of Orthopaedic Surgery, University of Pennsylvania School of Medicine, Philadelphia; in collaboration with Richard Beverly Raney, M.D., Associate in Orthopaedic Surgery, Duke University School of Medicine, Durham, North Carolina. Third edition. 574 pages, with 159 illustrations. Cloth. Price $6.00. The C. V. Mosby Co., St. Louis, 1948.

* * *

OCCUPATIONAL THERAPY SOURCE BOOK. Edited by Sidney Licht, M.D., with an introduction by C. Charles Burlingame, M.D., psychiatrist-in-chief. The Institute of Living. 90 pages. Cloth. Price $1.00. The Williams & Wilkins Company, Baltimore, 1948.

* * *

SYMPOSIA ON NUTRITION—NUTRITIONAL ANEMIA. Edited by Arthur Lejwa. 194 pages, with 78 illustrations. Fabrikoid. The Robert Gould Research Foundation, Inc., Cincinnati, 1947.

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DETAILED ATLAS OF THE HEAD AND NECK. By Raymond C. Truex, M.S., Ph.D., Associate Professor of Anatomy, College of Physicians and Surgeons, Columbia University; and Carl E. Kellner, Artist, Department of Anatomy, College of Physicians and Surgeons, Columbia University. 162 pages, with 136 color plates. Cloth. Price $15.00. Oxford University Press, New York, 1948.

* * *

TAKE OFF YOUR MASK. By Ludwig Eidelberg, M.D., member of the faculty of the New York Psychoanalytic Institute. 230 pages. Cloth. Price $3.25. International Universities Press, New York, 1948.

* * *

THE CLINICAL APPLICATION OF PSYCHOLOGICAL TESTS. By Roy Schafer, M.A., Staff Psychologist, The Austen Riggs Foundation, formerly Associate Psychologist, the Menninger Foundation. 346 pages. Cloth. Price $6.75. International Universities Press, New York, 1948.

* * *

MICROBIOLOGY AND PATHOLOGY. By Charles F. Carter, M.D., Instructor in Pathology and Applied Microbiology, Parkland Hospital School of Nursing, Dallas, Texas. Fourth edition. 845 pages, with 216 illustrations and 25 color plates. Cloth. Price $5.00. The C. V. Mosby Company, St. Louis, 1948.

* * *

YOUR BABY. The Complete Baby Book for Mothers and Fathers. By Gladys Denny Shultz, Contributing Editor, Ladies' Home Journal; and Lee Forest Hill, M.D., former president, American Academy of Pediatrics. 278 pages, with 41 illustrations. Cloth. Price $3.50. Doubleday & Co., New York, 1948.

* * *

BOOKS RECEIVED

OPERATIVE GYNECOLOGY. By Harry Sturgeon Crossen, M.D., Profesor Emeritus of Clinical Gynecology, Washington University School of Medicine; and Robert James Crossen, M.D., Assistant Professor of Clinical Gynecology and Obstetrics, Washington University School of Medicine. Sixth edition, revised and reset. 999 pages, 1334 illustrations, 12 color plates. Cloth. Price $15.00. The C. V. Mosby Co., St. Louis, 1948.

"Operative Gynecology" has been a standard American gynecology reference since 1915. This new edition is a big book and it was necesary to eliminate much historical information to keep it within bounds. It is devoted entirely to operative treatment. The discussion of the proper procedure for a presenting condition is an important feature.

Especial attention has been given to the prevention of cancer of the ovaries, uterus, and the external genitals. It is recommended that certain persisting local abnormal conditions, such as chronic cervicitis and leukoplakic vulvitis be corrected promptly. Also, it is pointed out that abnormally involuting ovaries and uteri may carry an increased cancer-potential. The judicious use of radium, along with curettage for the treatment of selected cases of myoma, is discussed. There is a discussion of the place of radical surgery in cancer of the uterus and excellent material on the radiation treatment.

There is a chapter on the intestinal tract in relation to gynecologic surgery, on anesthesia for gynecologic surgery, and on medicolegal points. Especial attention is given to prolapse of the uterus and bladder, and to cul-de-sac hernia.

In general, it is a book that no physician doing gynecologic surgery can afford to be without.

Pierce MacKenzie, M.D.

TEXTBOOK OF GENERAL SURGERY. By Warren H. Cole, M.D., Professor and head of Department of Surgery, University of Illinois College of Medicine, Chicago, and Robert Elman, M.D., Professor of Clinical Surgery, Washington University School of Medicine, St. Louis. Fifth edition. 1200 pages, with 920 illustrations. Cloth. Price $11.00. D. Appleton-Century Co., New York, 1948.

In the fifth edition of this fine textbook on general surgery we find a completely revised and rewritten text of the first edition which appeared in 1936.

The war and postwar periods have brought enormous changes in surgery and chemotherapy. These new developments are well covered in this latest edition. The new chapter on pre- and postoperative care and the rewritten chapter under the title of "Military Surgery" are of major importance.

The authors have been assisted in their work by nineteen consulting authors, each of whom is an outstanding authority in his particular field, and each has made a valuable contribution to the book.

In the thirty-four chapters the subject matter has been well classified under specific chapter headings. It is a book which is authoritatively written and well illustrated with 920 charts, tables and illustrations. This book should be very helpful to the undergraduate as well as to the general practitioner and the experienced surgeon who would be informed on the latest advances made in surgery.

F. R. Nicholas Carter, M.D.

* * *

A HISTORY OF THE HEART AND THE CIRCULATION. By Frederick A. Willius, M.D., M.S. in Med., and Thomas J. Dry, M.A., CH.B., M.S. in Med. Price $8.00. Pp. 456. Illustrated. W. B. Saunders Company, Philadelphia & London. 1948.

This is a beautiful book and a masterly attempt to combine in one volume a wealth of medical history in a form which makes the material contained trebly useful. It is really three books in one, consisting as it does of three sections of quite diverse treatments of the history of the heart and circulation.

The first section consists of a long essay which tells in a concise and readable way the story of the development of the concepts of the anatomy and physiology of the heart and its relationship to the blood vessels and the circulation of the blood.

The second section is a consecutive series of short, yet comprehensive biographies of those who have been responsible for the various major steps in the knowledge of the heart and circulation.

The third section is a chronological list of the dates of each of the episodes in the history of this subject with short explanatory notes attached to each date, each of which describes in summary form the event which the date identifies.

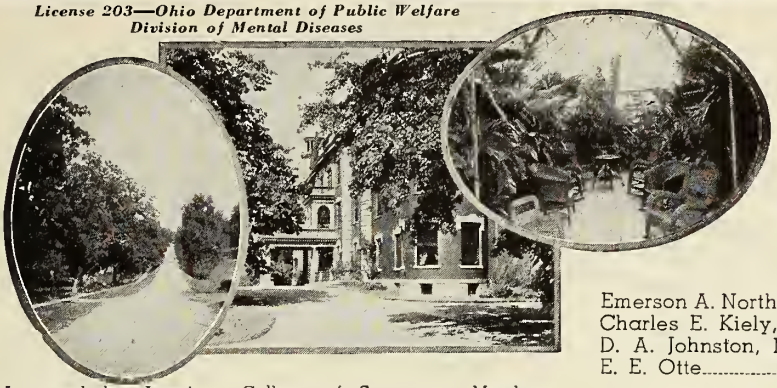
The book is profusely and beautifully illustrated and each chapter is followed by admirably arranged bibliographical references which cover the major sources of information regarding each of the subjects discussed.

Unfortunately all books on medical history are not as approachable as this one, and it would have been easy for the authors to have added another to the already large number of books which are simply reference volumes or which are simply studious discourses. However, this book is neither the one nor the other, and yet it combines the values and attractions of each with the advantages of a readable volume written in a manner that will appeal both to the student and the incidental reader.

It would be well for others to follow the distinguished example of these authors in making the various branches of medical history more accessible and approachable to the large majority of those who enjoy reading medical history for pleasure.

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P. S.: Page 1226 Lists This Month's Advertisers.

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MONTHLY REPORT—JULY, 1948

Diseases	July 1948	June 1948	May 1948	July 1947	July 1946
Brucellosis	5	8	11	7	20
Chickenpox	48	134	286	27	55
Diarrhea, Epidemic	2	2	4	0	0
Diphtheria	18	22	55	10	8
Dysentery, amebic	2	0	1	0	0
Encephalitis	3	4	3	0	0
Impetigo	18	0	1	3	0
Influenza	3	2	2	3	0
Malaria	1	1	0	8	0
Measles	230	1639	3920	156	111
Meningitis,					
Unspecified	7	5	5	1	5
Meningococcic	3	6	2	5	0
Pneumococcic	1	0	0	0	0
Mumps	69	222	565	22	56
Paratyphoid	1	1	3	0	0
Pneumonia	21	26	16	12	9
Poliomyelitis,					
Paralytic	25	9	3	5	0
Nonparalytic	16	1	3	3	0
Unspecified	2	3	0	0	21
Rabies, animal	82	65	142	0	0
Rheumatic fever	2	3	1	0	0
Rocky Mt. Spotted Fever	2	6	1	5	0
Rubella	10	23	76	0	0
Scarlet Fever	41	103	170	58	35
Septic Sore throat	5	4	2	9	0
Tetanus	2	1	3	0	0
Tinea Capitis	6	17	34	13	0
Trachoma	2	0	0	0	0
T.B., Pulmonary	315	244	204	191	85
T.B., Other forms	13	15	17	9	5
Typhoid	10	5	4	8	17
Vincent's Angina	1	0	0	1	0
Whooping Cough	45	25	99	220	103

MONTHLY REPORT—AUGUST 1948

Brucellosis	5	5	8	6	26
Chickenpox	5	48	134	32	21
Diphtheria	11	18	22	11	19
Dysentery, bacillary	8	0	2	1	0
Dysentery, unknown	3	0	0	0	0
Encephalitis	2	3	4	1	2
Food infection	3	2	0	2	0
Impetigo	3	18	0	13	4
Influenza	2	3	2	1	2
Malaria	3	1	1	1	28
Measles	25	230	1639	48	22
Meningitis,					
Unclassified	3	7	5	7	5
Influenza	1	0	0	0	—
Meningococcus	1	3	6	3	—
Noninfectious	1	0	0	0	—
Mumps	27	69	222	10	26
Paratyphoid	1	1	1	0	0
Pneumonia	10	21	26	15	12
Poliomyelitis,					
Unspecified	7	2	3	0	107
Paralytic	54	25	9	26	—
Non-paralytic	14	16	1	33	—
Rabies in animals	60	82	65	—	—
Rheumatic fever	1	2	3	1	0
Rocky Mt. Spotted fever	2	2	6	3	4
Rubella	4	10	23	2	2
Scarlet fever	33	41	103	48	63
Septic Sore Throat	1	5	4	7	27
Tetanus	2	2	1	4	1
Tinea Capitis	1	6	17	0	0
T. B., pulmonary	195	315	244	253	296
T. B., other forms	13	13	15	7	19
Tularemia	1	0	1	1	5
Typhoid fever	5	10	5	28	13
Vincent's Angina	4	1	0	2	5
Whooping Cough	43	45	25	252	100

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Secretary, E. L. Engel, M.D., Evansville.

DELEGATES TO THE A.M.A.

For One Year (terms expire Dec. 31, 1948): H. G. Hamer, M.D., Indianapolis, and A. S. Giordano, M.D., South Bend. Alternates: Karl R. Ruddell, M.D., Indianapolis, and E. S. Jones, M.D., Hammond.

For Two Years (terms expire Dec. 31, 1949): F. S. Crockett, M.D., Lafayette, and William M. Cockrum, M.D., Evansville. Alternates: A. M. Mitchell, M.D., Terre Haute, and Norman M. Beatty, M.D., Indianapolis.

COUNCILORS

District	Councilor	Term Expires
1	Herman T. Combs, Evansville	Dec. 31, 1950
2	James H. Crowder, Sullivan	Dec. 31, 1948
3	William H. Garner, New Albany	Dec. 31, 1949
4	George A. May, Madison	Dec. 31, 1950
5	A. M. Mitchell, Terre Haute	Dec. 31, 1948
6	W. U. Kennedy, New Castle	Dec. 31, 1949
7	Cyrus J. Clark, Indianapolis	Dec. 31, 1950
8	E. H. Clauser, Muncie	Dec. 31, 1948
9	Wemple Dodds, Crawfordsville	Dec. 31, 1949
10	William H. Howard, Hammond	Dec. 31, 1950
11	C. S. Black, Warren	Dec. 31, 1948
12	Paul A. Garber, South Whitley	Dec. 31, 1949
13	Alfred Ellison (Chairman), South Bend	Dec. 31, 1950

1947-1948 DISTRICT MEDICAL SOCIETY OFFICERS

District	President	Secretary	Place and date of meeting
1	Virgil McCarty, M.D., Princeton	William O. Denzer, M.D., Evansville	
2	J. T. Oliphant, M.D., Farmersburg	J. S. Brown, M.D., Carlisle	Sullivan
3	William E. Amy, M.D., Corydon	John L. Gwinn, M.D., Corydon	Corydon
4	Charles N. Manley, M.D., Rising Sun	F. A. Streck, M.D., Lawrenceburg	
5	J. F. Maurer, M.D., Brazil	M. C. Topping, M.D., Terre Haute	Brazil
6	Will A. Thompson, M.D., Liberty	Robert W. Kuhn, M.D., Wilkinson	Greenfield
7	Harry Murphy, M.D., Franklin	Donald E. Wood, M.D., Indianapolis	Indianapolis
8	Joseph H. Clevenger, M.D., Muncie	Ramon A. Henderson, M.D., Muncie	Muncie
9	George H. Warne, M.D., Tipton	George Compton, M.D., Tipton	Tipton
10	Neal Davis, M.D., Lowell	Frank G. Sink, M.D., Remington	Whiting, March 16
11	W. W. Holmes, M.D., Logansport	O. G. Brubaker, M.D., North Manchester	Logansport, May 18, 1949
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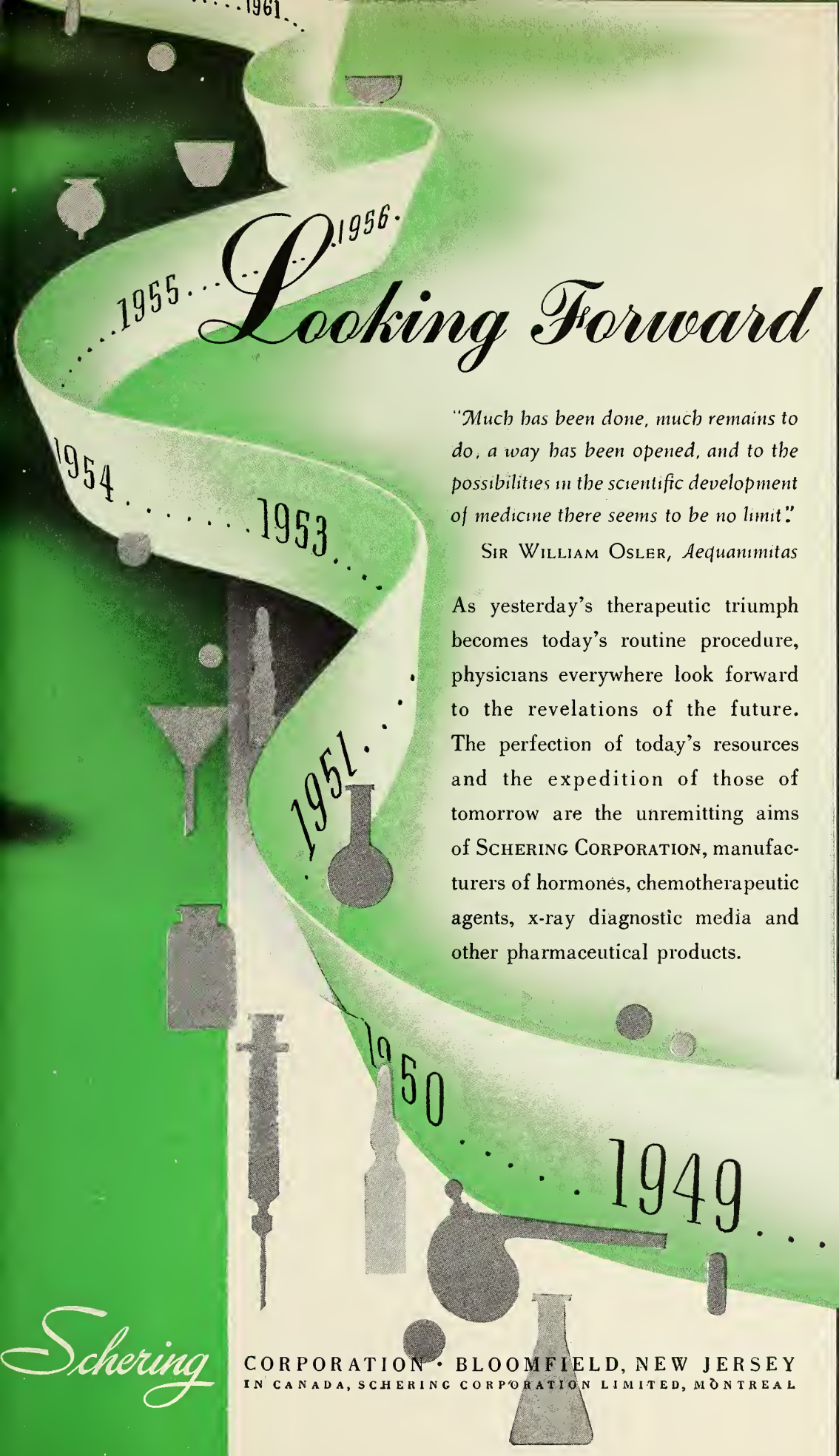
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OBSERVATION*

WILLIAM K. KELLER, M.D.†

LOUISVILLE, KENTUCKY

OBSERVATION is probably the greatest single diagnostic aid which the physician possesses. We can learn much from looking at a patient, but quite often we do not look far enough. We look at the patient in a comprehensive way, getting some idea of the state of nutrition, color of the skin, and some general impressions. Then we look for pathology, but too often this pathology is sought only in the realm of the organic. As doctors, we are oriented somewhat as follows:



A patient comes to us complaining of symptoms, not of a disease. We attempt to find the disease by adding together the history, our knowledge of symptomatology, the physical findings, and the laboratory work. Usually, we arrive at a diagnosis and instigate as specific treatment as possible. It is sometimes amazing that doctors who have known so many intimate problems of their patients can develop such a blind spot for the part feelings play in their patients' symptomatology and diseases. Certainly no doctor would hunt for a brain tumor, for instance, in a patient who had fainted at the reception of overwhelming, bad news, and there would be no yearning to do a G.I. series on a patient who had vomited at the sight of blood. Surely we would all immediately attribute these things to "nerves," "nervousness," or to an emotional upset. The reason for this is simple. Our observation has shown us immediate cause and effect, but what happened to the individual who got the bad news and fainted? He fainted, but what was the modality of this faint? Let us suppose that he received this bad news over the telephone. By pressing the receiver to his ear his eighth nerve picked up a series of sounds and conducted them to that portion of his brain having to do with memory, allowing him to understand what these sounds meant, and then these sounds, having been translated in some fashion unknown to us into words, and those words called other memories and concepts which so stimulated another part of his brain that the idea momentarily caused such a cerebral anemia that he temporarily lost consciousness and for the moment psychologically ceased to function, or to die. His blood pressure dropped, he had no control over himself, he fell, his pulse became weak and thready and he probably perspired. How did this happen? One does not know exactly, but it did. He fainted and in a relatively short while this chain of events showed itself to be reversible. His pulse came back, his blood pressure rose and psychologically he came to life again; thereupon other concepts were conjured up in this great unknown organ called the brain, and perhaps he went to the phone and relayed this same message, this time using, perhaps, the same words himself, but experiencing a rapid pulse,

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probably an elevated blood pressure, and also, probably, some flushing, but did not faint. It was exactly the same individual, only perhaps ten minutes older, exhibiting many of the same symptoms which he would have had, had he suffered a severe hemorrhage or been subjected to a devastating trauma.

Similar mechanisms were at work in the patient who received the visual impulse from a bright red body fluid, only the medium of expression here was the stomach which resulted in a disgorgement of vomitus. As suggested, we are not overly concerned because of its reversible nature and the fact that we would, in these hypothetical cases, observe cause and effect. What if similar emotional stresses and strains are applied over a long period of time, are not observed by the doctor, and may not be recognized by the patient? Why is it unlikely that the patient who feels weak and exhausted may not daily be receiving small bits of unpleasant news, or the patient with chronic gastric discomfort may not be "seeing red" most of his waking life? We must have some means of expressing every symptom. An individual who has had one lobe of a lung removed can never again develop any infection in that lung; a quadruple amputee cannot fracture a limb; a gastrectomized patient can never develop cancer of the stomach. If the foregoing is obvious and true, then, as doctors, we simply must take cognizance of the simple and self-evident fact that emotions, feelings, call them what you will, most assuredly can have an effect on any part of our bodies.

Objections have been raised to the term "psychosomatic medicine," because it suggests something new, something more than medicine, whereas medicine itself, good medicine, certainly includes an understanding of all things at work, whether it be the misalignment of a limb, valvular heart disease, or dissatisfaction with one's work—they are all factors and must be considered and understood. The history of medicine is filled with small voices hinting at the role that nervousness, excitement, and tensions play in the causation of various medical entities.

It is commonly considered that the general practitioner finds no organic pathology in about 50 percent of his cases. What then brings these people to the doctor? Is it imagination? Is there "nothing wrong with them?" Are they stupid fools who have too much money and feel a need for donating it to their doctors? One doubts it very much. Imagination indeed! If you are close enough to one of these imaginative people with, say, hysterical vomiting, it would cost you approximately one dollar to get the patient's imagination cleaned off your suit. They are human beings who differ from thee and me only in degree of severity of symptoms and perhaps in method of expression. They differ from thee and me only in degree, because when we are frustrated and cannot immediately see the cause for the symptoms in our patients, when their blood count, x-ray and sedimentation rate are normal, we react in a neurotic fashion to our sense of frustration and tell the patient it is his imagination, or that there is "nothing wrong with him." We really should be telling him something like this: "I find nothing organically wrong with you, but I am interested in what things in you, your life, or your surroundings might be causing discomfort or dissatisfactions which can result in these symptoms."

Only rarely does a psychoneurotic patient die of his psychoneurosis and yet we, as physicians, get irritated at this patient when actually we should be quite happy, for we have determined to the best of our ability that what he or she has will probably not kill him but is, like the faint, potentially reversible.

Now it is true that a lot of psychiatric care is time-consuming and that many of us are impatient with our patients or simply do not like to treat this type of illness, but it is becoming more and more recognized that the average doctor certainly has the medical responsibility to recognize that there are many emotional problems which he is in a better position to handle than the psychiatrist. He knows the patient as a person, sees him first, and therefore is in the best position to rule out organic disease pointed to by the patient's symptomatology.

One hopes that no psychiatrist will ever be stupid enough to say that all illnesses, diseases and injuries are due to emotional difficulties. An acute appendix should come out; a decompensated heart needs bed rest; tuberculous cavitation may demand collapse, but it is well for all of us to remember that that appendix, that leg, or that lung are attached to a person. It is also perhaps worth-while to recall that we have all had stomach upsets, some completely unexplained, some due to indiscretions, dietary and otherwise. We have all, sometime or other in our past, needlessly exposed ourselves or overworked ourselves, and we have also been so preoccupied with our own thinking that we have nearly had an accident.

Although it is not held that all illnesses are caused by emotions or attitudes, neither are they all cured by removal of the offending part or the bedding down of symptoms by medication. Most urologists have given up the treatment of enuresis by cauterization. Bromides are losing some of their prestige in doing away with nervousness. Obstetricians feel rather differently about the vomiting of pregnancy. As investigation goes on, we are finding more and more that there are certain patterns in certain illnesses and that there are certain common findings in the personalities of people who develop some illnesses. In some fifty patients with hypertensive cardiovascular disease, Lidz at Hopkins has found an underlying personality pattern of a chronically tense, aggressive person with a good deal of impatience and inherent irritability, held down by social demands and a civilized overlay. Dr. Sprague Gardiner recently reported on

some work in England on endometrial biopsies taken in cases of amenorrhea. The examination of these slides was made by Novak in this country, who estimated the time in the menstrual cycle in which they were taken. These findings coincided exactly with the time the patients received various emotional shocks. There are literally hundreds of similar investigations going on throughout this country, and certainly all of us have had some startling or unusual experience with emotional factors in illness, from the dermatoses to constipation.

The following case briefs illustrate the foregoing:

D. L., an 18-year-old, white, unmarried, Protestant female, was seen in consultation with an internist because she had been suffering from severe bronchial asthma since the age of 10. Drastic medication was at times necessary to control the attacks. She had been skin-tested and treated by two allergists in other cities where her father had taken her for treatment. Except for the asthmatic attacks, the girl's general health had been good. Coming from a family of quite adequate means, the house had been air-conditioned and even the walls were treated with a substance which allowed them to be washed to rid them of the house dust.

In talking with this patient, it was determined that the onset of her asthma coincided with the birth of a younger sister, and that the sister was greatly made over by the parents at the expense of attention to the patient. Our patient completely dominated the family with her illness. On one occasion she was taken to visit a relative and during that week was entirely symptom-free. Two hours before her return she developed a markedly severe attack. At the time this girl was first seen she was in a typical bronchial asthmatic attack. Within a week, under very superficial psychiatric treatment, her symptoms had decreased and she was able to verbalize her feelings of hostility toward her younger sister, as well as toward her father because of her belief of his rejection of her. Within a month she was entirely free of symptoms and was able to return to the setting in which her illness developed. It has been two years now since she has had any asthmatic symptoms whatsoever.

R. S., a 36-year-old, white, married, Catholic, taxi driver, was admitted to the Louisville General Hospital with a chief complaint of gastric discomfort, burning after eating, and occasional vomiting. This man was found to have definite evidence of gastric ulcer by all methods of examination. His red count was three million, with 60 percent hemoglobin. He had tarry stools. He was placed on old Sippy regime, beginning with the first day.

In talking to this patient, it was determined that he had always been a hard-working, conscientious person who anticipated many difficulties which never arose. At 36 he found himself driving a taxi and barely making a living for his wife and eight children. He had taken the job driving a taxi the previous year, having been laid off as a skilled mechanic when the plant closed. He had built up a fair amount of seniority and was making much better wages than he was making driving a cab. His job also necessitated his working at odd hours, so it became increasingly distasteful and tensing to him. His symptoms improved in the hospital, contact was made with the personnel department of another plant, and in one month he was able to go back to work at a similar occupation to that which he had formerly held. Six months later he had gained thirty pounds; was eating a regular diet, and by x-ray showed not even any scarring left by his previous ulcer. He was seen again in a follow-up a year later, at which time he was completely symptom-free, a happy person, and the father of one more child.

These are but two simple examples of how patients can be helped to help themselves by the doctor's observation of the patient as a person.

Let us, therefore, broaden the scope of our observations to include all of the factors having to do with our patients, so that we may indeed be worthy of the name, "physician."

Medical Year Book Issue of THE JOURNAL Postponed

The Editorial Board deems it advisable to change the Medical Year Book issue of THE JOURNAL from January until later in the year. The membership roster, personnel of state boards, officers of county medical societies, and other material contained in the Medical Year Book can be assembled more accurately in the midyear. Copies of the roster which was contained in the 1948 Year Book are still available.

VIRUS DISEASES IN CHILDREN*

ALBERT D. KAISER, M.D.†

ROCHESTER, NEW YORK

THE viruses represent the etiologic agents of such diseases as smallpox, chickenpox, yellow fever, herpes simplex, mumps, poliomyelitis, rabies, measles and some respiratory diseases. These agents, termed midget parasites, are obligate parasites and have not been cultivated on ordinary lifeless media. Many of them, however, have been induced to multiply in vitro in the presence of living cells. They are too small to be seen with the ordinary microscope, and in general are capable of passing through a standard filter which prevents the passage of bacteria. They vary in diameter from 225 millimicrons (vaccinia) to 11 millimicrons (influenza). For the most part viruses are extraordinarily selective in the cells they multiply in. The viruses of rabies and of poliomyelitis multiply only in cells of the nervous system, whereas the virus of mumps multiplies in many different glandular tissues as well as in cells of the nervous system. The virus of yellow fever is found in enormous concentration in the blood during the three days of the height of the disease, while the virus of influenza multiplies in the epithelial cells of the upper and lower respiratory tract and is never found in the blood at any stage of the disease. The primary effect of viruses upon tissues is either stimulation or necrosis, and inflammation is a secondary phenomenon. Virus diseases as a rule are followed by a lasting immunity.



It is frequently stated that virus diseases represent a group of infectious maladies of unknown origin, or that the virus group serves as a "catch-all" for infectious processes whose exciting agents are unknown. It is true that the exact nature of these agents is unknown, but to say that the agents themselves are unknown is somewhat of an exaggeration. Rivers[1] has stated that there is sufficient evidence to justify the belief that all viruses are of the same nature. Some may be inanimate transmissible incitants of disease, others may be primitive forms of life unfamiliar to us, still others may be minute living organisms. Though much remains to be learned about the recognition and cultivation of viruses, considerable is known about them by their activities, that is, by the type of host or hosts attacked, by the clinical and pathological pictures induced and by the immunologic responses excited.

There are many diseases known to be caused by viruses and others strongly suspected of being caused by viruses. Some virus diseases which attack mankind are essentially diseases of animals and attack man only occasionally, as when a mad dog bites a man, or when a man attends a parrot sick with psittacosis. Some virus diseases may be entirely confined to man as far as is known, among which are a number of common diseases usually acquired in childhood. The common maladies in children thought to be caused by viruses are the common cold, herpes simplex (cold sores), measles, poliomyelitis, smallpox, influenza, mumps and pneumonia. Chickenpox, epidemic encephalitis and German measles are strongly suspected of being caused by viruses.

The diagnosis of these diseases usually presents no great problem. However, the prevention and control of most of these maladies in children is important. The first objective is to decrease morbidity, and the second is to decrease mortality. To realize this objective four types of activity are necessary: first, application of specific treatment to limit disability and death, and indirectly shorten periods of communicability; second, to apply measures intended to limit the spread of virus; third, to develop immunologic methods leading to specific protection of the individual, and thus raise the level of community resistance; lastly, to devise procedures for determining factors influencing susceptibility and the methods of selecting the susceptible for specific measures.

Unfortunately medicine has little to offer in respect to specific attack on acute virus disease. The results of treatment with human convalescent serum or laboratory products are generally disappointing. Immunologic principle is opposed to success, because once a virus has established itself inside cells, little benefit can be expected from antibodies transported by blood or lymph and acting extracellularly, even though given in large amounts.

Modification of symptoms can be obtained with considerable success by the use of convalescent serum. In virus diseases with an appreciable incubation period and readily determined exposure, convalescent serum has the effect of limiting the distribution of the virus, thus preventing its entry

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[1] Rivers, Thomas M.: General Aspects of Infection and Resistance. Brennaman's Practice of Pediatrics. Chapter 1. Volume II. Page 6.

into cells not already involved. As a consequence, some modification of the disease process can be expected even when the infection is partly under way. This principle has its greatest application in measles and has a certain amount of usefulness in other virus infections, such as mumps. This is also the principle involved in the active immunization of persons exposed to smallpox, in whom subsequent disease can be modified to a degree, even when vaccination is done well into the incubation period.

In the present state of knowledge, the most general and dependable method of combating virus diseases as a group is to limit the spread of the infectious agents. Preventing unnecessary risk of exposure, limiting dissemination of the infectious agent by vectors or through contact, and eliminating virus reservoirs are useful measures. The successful procedures utilized in combating the common virus infections in children vary.

Before discussing the methods employed for the common virus diseases in children, it should be pointed out that certain known factors in virus diseases influence treatment with drugs. The virus is an organism which only undergoes multiplication within the protecting wall of the cell membranes of the host. Its intracellular location enables it to obtain the raw materials needed for its multiplication directly from the host cells which are thereby modified and often destroyed. Bacteria are essentially extracellular in location within the host and can be reached readily by chemicals circulating in the blood or lymph. Thus either their multiplication may be arrested, as for instance by sulfonamide compounds, or they may be killed by antiseptics, or both types of action may occur, as with penicillin. The fact that the phase of virus multiplication is protected by the barrier of the cell membrane means that, if successful chemotherapeutic action is to occur, antiviral agents must theoretically possess specific powers of penetration through cell membranes and attack the virus without thereby destroying the host cell. Although nothing similar to the therapeutic results obtained with bacterial and spirochetal diseases can be pointed to in the viral field, sufficient evidence has been obtained to warrant the hope that eventually chemotherapeutic agents and antibiotics will be found effective against maladies in the virus group. Up to the present it has been quite definitely shown that viral and rickettsial maladies of human beings do not respond to known chemotherapeutic agents and antibiotics, with the exception of diseases in the psittacosis-lymphogranuloma and the typhus-Rocky Mountain spotted fever groups. Therefore, indiscriminate use of these substances in the treatment of such diseases of man is inexcusable. However, some value has been demonstrated in treating virus infections with serum rich in immune bodies. If the treatment is instituted early in the illness, before there is extensive cell invasion by virus, and large repeated doses are administered by a route which will bring the immune bodies rapidly in contact with the tissue cells, some modification of a few diseases can be anticipated.

MEASLES

Though there has been a steady decline during recent years in the number of deaths from measles, the disease is still looked upon as dangerous in children of preschool age. Needless exposure, particularly of small children, is unwarranted and should, if possible, be avoided. The direct case fatality figures do not illustrate well the dangers of measles, for the disease is often followed by severe and dangerous complications which may terminate fatally weeks or even months after the eruption has passed.

An effective means of securing temporary protection against measles is a procedure now thoroughly established, consisting of the prophylactic injection of patients after exposure with human convalescent serum, adult immune serum, or immune globulin. Antibodies against measles are found in the blood of almost all patients who have recovered from the disease. The titer of these antibodies is greater in patients recently convalescent, but in most individuals apparently persists in protective quantities throughout life.

Measles serum prophylaxis demonstrates very nicely the time relationship of serum administration and the effect on the disease or the serum inhibiting effect on the virus in the host. If the amount of serum is held constant, it will usually cause complete protection when given in the first four days of the incubation period, cause sero-attenuated measles if given between the fourth and eighth days of the incubation period, but will be valueless thereafter. Although accurate comparative studies are not available, a study of the published results indicates that convalescent measles serum, globulin from adult serum, and immune globulin from placental extract are probably comparable in potency. The dose generally recommended is 2 cc. for infants; 3 to 5 cc. for young children up to the age of five years; and for older children, except for infants in whom complete protection is desirable, it is preferable to give the serum on the fifth to seventh day of the incubation period, in an attempt to produce a sero-attenuated or modified measles which is followed by an active immunity. If the serum injection is delayed until the eighth or ninth day, the serum may have little effect, although in larger doses some influence has been observed even through the pre-eruptive stage of the illness.

GERMAN MEASLES (RUBELLA)

Until recently German measles was considered a mild and harmless disease. However, when Albaugh[2] described the likelihood of congenital abnormalities in the fetus following maternal rubella

[2] Albaugh, C. H.: Congenital anomalies following maternal rubella in early weeks of pregnancy. J.A.M.A., 129-719-723 (Nov. 10, 1945).

in the early months of pregnancy, efforts were made to prevent German measles in pregnant women. According to Albaugh, the critical period for the attack seems to be the first two months; 100 percent of fetuses of mothers contracting rubella in this period are said to be injured. Of mothers contracting rubella in the third month, 50 percent give birth to infants with congenital anomalies. The same method employed in the prevention or modification of measles should be applied in any pregnant woman exposed to German measles.

MUMPS

It has now been well established that mumps is caused by a filtrable virus which can be recovered from the saliva only during the first days of the disease, and that it is resistant to glycerin, drying and freezing. Though mumps is generally considered in the general run of cases as an epidemic disease of relatively mild character, there is statistical evidence that a significant number of infected individuals develop such serious complications as orchitis, ovaritis, pancreatitis and neurologic manifestations. It appears that these complications are least likely to occur between the ages of five and ten. Numerous attempts have been made to treat mumps in the acute stage with convalescent mumps serum. The reported results are not convincing that the incidence of complications has been reduced. Possibly very large doses of convalescent serum could influence the course of the disease after the incubation period is passed.

The prevention of mumps by the early use of convalescent serum is an entirely different matter. Mumps can be prevented in a high percentage of cases with 5 cc. of convalescent serum seven days after exposure. There is no assurance that this prevention is of lasting character. On the contrary, an individual would have to be given serum with every subsequent known exposure throughout life if protection were to be guaranteed.

Recently Enders, Cohen and Kane[3] were able to demonstrate the development of dermal hypersensitivity in persons convalescent from mumps utilizing inactivated mumps virus. In a systematic survey of almost 300 students at Harvard Medical School, a dermal reaction consisting of an area of erythema measuring at least 10 by 10 mm. was obtained in 96 percent of those students who had a definite past history of mumps. Skin tests were checked with mumps complement fixing antibodies. A positive dermal reaction, with rare exception, means immunity. The intradermal test is of no value as an aid in diagnosis.

RESPIRATORY INFECTIONS

Viral infections of the respiratory tract are responsible for many minor illnesses in children. They are rarely a direct cause of death, but they precede or incite many other serious infections. Different clinical entities exist. In the common cold, the nasal lining is inflamed, causing profuse discharge. There may be associated pharyngitis, tonsillitis, or sore throat. When constitutional symptoms are present, the malady is termed grip. Where the cold is characterized by dry, inflamed membranes, with cough, the clinical entity is termed a viroid infection. There are of course many variations in these so-called viroid respiratory manifestations. Variations may be accounted for by different reactions of different hosts to the same virus, and also to infection with a number of different viruses, some of them probably related. In some of them gastro-intestinal symptoms may predominate.

Pneumonia occurs in a small percentage of most epidemic diseases of the respiratory tract. Until recently pneumonia was usually regarded as a different disease or a complication caused by the secondary invasion of pathogenic cocci of a field prepared by the viral infection, which indeed it may be. There is, however, ample evidence that a primary bacteria-free viral pneumonia does occur. So-called "atypical" or viral pneumonia is being seen with increasing frequency. Although this disease is classified as a clinical syndrome, viruses have been isolated which fall in the psittacosis or ornithosis group. Recently a virus was recovered from patients which can be maintained by passage in chick embryos and cause pulmonary lesions in hamsters and cotton rats, which is neutralized by convalescent serum and can be differentiated from the psittacosis group of organisms by neutralization tests. It is estimated that the newly discovered virus is the cause of 60 percent of the incidence of viral pneumonia.

Influenza is clinically indistinguishable from other viral infections of the respiratory tract. The term should be used only in its restricted sense for disease caused by the viruses of Influenza A and B. Diagnosis can only be made by the isolation and identification of the viruses or the serologic evidence of their activity by the complement fixation test, the Hirst chicken erythrocyte agglutination test, and later by the demonstration of specific protective antibodies. Etiologic diagnosis is essential for epidemiologic investigation and for the efficient use and evaluation of the specific prophylactic anti-influenza vaccines now available.

Treatment of viral respiratory infections has not been satisfactory. As pointed out by Rivers,[4] chemotherapeutic agents and antibodies have not proved effective except in "atypical pneumonias" shown to be caused by the psittacosis group of virus. Wiseman[5] and his associates have recently

[3] Enders, J. F.; Cohen, S. and Kane, L. W.: Immunity in Mumps II-Development of complement fixing antibody and dermal sensitivity in human beings following mumps. J. Exper. Med. 81: 119-135. 1945.

[4] Rivers, Thomas M.: Viral and Richettsial Diseases. J.A.M.A. 136-291-292. (Jan. 31, 1948).

[5] Wiseman, R. W.; Meiklejohn, G.; Lockman, D. B.; Wagner, J. C. and Beveridge, G. W.: Studies on the chemotherapy of Viruses in the Psittacosis-Lymphogranuloma Group. J. Immunol. 54:9-6 (Sept.) 1946.

reported that penicillin and sulfadiazine have some therapeutic value when used against certain strains of viruses in the psittacosis - lymphogranuloma group. During an outbreak of "atypical pneumonia" at a Naval Air Station, Soloman[6] found an opportunity to treat ten unselected patients with convalescent serum. He administered 250 cc. intravenously within three days of onset of illness, and reported crisis within twelve to eighteen hours following serum treatment, rapid recovery from illness, and discharge to duty after an average of twenty-two days. The control, untreated patients, usually recovered slowly, the temperature dropped by lysis, and they averaged thirty-nine days in the hospital before discharge to duty. Until more potent therapeutic agents are available it seems reasonable to administer convalescent serum, if obtainable, in "atypical pneumonias." Chemotherapy should be restricted to the treatment of those acute complications, such as otitis media or sinusitis demonstrably due to H. Streptococcus, Pneumococcus, or a pyogenic Staphylococcus.

GASTRO-INTESTINAL DISORDERS

Gastro-intestinal derangement in the form of anorexia, nausea and vomiting occurs in some patients with disease of the respiratory tract. This occasional occurrence gave rise to the undesirable term "intestinal influenza," when in reality the symptoms are identical to a disease of the respiratory tract.

For the past 25 years reports have appeared of widespread epidemic diseases in which symtoms of gastro-intestinal disorders predominate over those arising from the respiratory tract; these diseases seem to be specific entities, commonly called epidemic nausea, vomiting and diarrhea. Their epidemiologic similarity to viral disease of the respiratory tract, together with suggestive evidence that they are caused by filtrable, air-borne agents, justify their mention as viral dysentery. No effective treatment has been developed for gastro-intestinal viral infections.

POLIOMYELITIS

Acute anterior poliomyelitis is an acute febrile disease of virus origin. Specific substances neutralizing the virus of poliomyelitis are demonstrable in the serum of convalescent patients and in a high percentage of normal adults. Numerous attempts have been made to produce poliomyelitis immune sera in nonsusceptible animals, such as the horse, sheep or goat.

Experimentally it has been established that convalescent serum or hyperimmune animal serum will neutralize poliomyelitis virus if mixed with the virus prior to injection of the mixture into the susceptible experimental animal (monkey). It has been definitely shown that convalescent serum does not protect the experimental animal if injected after the animal develops symptoms of the disease, nor indeed if given intravenously or intramuscularly at the same time that the virus is injected intracerebrally. These observations suggest that once the nervous system has been invaded it is too late for antiserum to exert any effect. Experimental evidence therefore does not lead to the expectation of beneficial results from the use of convalescent serum in therapy of patients ill with poliomyelitis. Results reported in the trial of convalescent serum in the therapy of the human disease leads likewise to the conclusion that convalescent serum has little or no effect on the course of the disease after the appearance of paralysis.

Despite the evidence of the inefficacy of serum at any time in the acute illness in the experimental animal, numerous reports have appeared of beneficial results to patients treated in the preparalytic stage of poliomyelitis by the administration of convalescent serum in varying amounts. Beneficial results from the use of convalescent serum were obtained only in cases that were treated during the preparalytic stage, at a time when no sign or symptom served to indicate the severity or extent of the paralysis that might follow. Throughout several years there was accumulated a group of patients presenting all the signs and symptoms of preparalytic poliomyelitis, including changes in the spinal fluid, who received no treatment in the preparalytic stage, and who none the less did not develop paralysis. These reports, and particularly the one by Kramer[7] and his associates, definitely answered in the negative any question of the efficacy of human convalescent serum. Hyperimmune animal sera seem to have been no more successful in the treatment of the human disease than convalescent serum has been. Indeed, no specific measure yet suggested appears to prevent the progress of the disease in the patient infected with the virus.

As in other virus diseases, the sulfonamides and antibiotics have been administered with no demonstrable beneficial effects. Attention is now being directed to the experimental use of a new sulfonamide known as phenosulfazole. Though clinical experience with this new drug is limited, it has some promise of success because it acts on tissue cells rather than on the virus.

Of the various procedures which have been employed in attempts to prevent poliomyelitis, some have been based on little more than supposition, others have had a sound theoretic basis, and still others the backing of experimental demonstration; but none have the support of actual successful application. While adequate isolation and quarantine might serve as a means of individual prophylaxis, such measures cannot be applied adequately

[6] Solomon, Ernest M.: Human Serum Treatment of Atypical Pneumonia. J. Lab. & Clin. Med. 29 (5); 493-499 (May) 1944.

[7] Kramer, S. D.; Aycock, W. L.; Solomon, C. J. and Thenebe, C. L.: Convalescent serum therapy in preparalytic poliomyelitis. New England J. Med. 1932, 206, 432.

to curtail to any appreciable extent the dissemination of the virus. Serum therapy and passive immunization, based on a sound immunologic principle, have not met with success in the experimental disease. Active immunization, supported by at least partial experimental demonstration, has proved neither safe nor efficacious for practical use. In the absence of any prospect of a measure which would abolish the possibility of exposure to the virus of poliomyelitis, it would appear that a clearer understanding of the factors which determine the occurrence of the paralytic disease in the majority of those exposed is essential to practical control.

In the light of our present information, successful therapy and prophylaxis are definitely limited in the common childhood virus diseases. In no other disease has the successful method of smallpox vaccination been duplicated. The field of virus research is relatively new, and rapid progress is still impeded by many difficulties. It must be remembered that a virus is an organism which only undergoes multiplication within the protecting wall of the cell membranes of the host. Its intracellular location enables it to obtain the raw materials needed for its multiplication directly from the host cells which are thereby modified and often destroyed. Bacteria are essentially extracellular in location within the host and can be reached readily by chemicals circulating in the blood or lymph. Thus, either their multiplication may be arrested, as for instance by sulfonamide compounds, or they may be killed by antiseptics, or both types of action may occur, as with penicillin. The fact that the phase of virus multiplication is protected by the barrier of the cell membrane means that, if successful chemotherapeutic action is to occur, antiviral agents must theoretically possess specific powers of penetration through cell membranes and of attack on the virus without thereby destroying the host cell. It is hoped that chemical agents with these properties should ultimately be found. In the meantime the introduction of immune bodies into the host and their presence at the location of infection should protect the healthy cells from invasion by virus. This probably is the mechanism of therapeutic efficacy demonstrated in a number of virus infections, notably measles.

The early diagnosis of virus infection is important. At present we are generally handicapped by vague diagnostic criteria. Laborary tests to aid the clinicians to establish a definite early diagnosis are generally not available. Stokes[8] has recently placed the greatest stress on the importance of earlier diagnosis. Progress is being made in laboratory tests which should soon make possible more accurate diagnosis of suspected cases.

29 Buckingham St.

[8] Stokes, Joseph, Jr.: The use of Immune Bodies in the Treatment of Certain Infectious Diseases (Virus and Rickettsial Diseases) caused by Intracellular Parasites. Yale J. Biol. & Med., 16 (5): 463 (May) 1944.

A CASE OF ARSENIC ENCEPHALOPATHY SUCCESSFULLY TREATED WITH BAL*

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ALTHOUGH BAL was developed during the late war for protection of troops against the arsenic-containing gases Lewisite and Adamsite, it has, since the lifting of restrictions concerning its use and distribution, assumed an important role in peacetime in the treatment of all types of arsenical poisoning. Chief among these are the reactions which have followed upon the administration of arsenical compounds in the treatment of syphilis, particularly those occurring during or after the so-called "rapid" method has been used. One of the most troublesome intoxications encountered and, heretofore, one which carried with it a mortality rate of from 50 per cent to 75 per cent, is that of arsenic encephalopathy or "hemorraghic encephalitis." It is the purpose of this paper to present a case of arsenic encephalopathy successfully treated with BAL and to review the subject briefly.

In 1940, Stocken[1] showed that arsenic owes its toxic properties to the fact that it combines with the sulfhydryl groups of the respiratory enzymes to form a dithiol arsenite. A search for a dithiol compound which could detoxify the tissues by forming a more stable substance with arsenic than the tissue arsenite culminated in the discovery of BAL, or 2, 3-dimercaptopropanol. That BAL can actually accomplish this, that is, remove arsenic from the tissues, was demonstrated by Eagle[2] who "killed" trypanosomes with arsenicals and then

* Published with the permission of the Chief Medical Director, Department of Medicine and Surgery, Veterans Administration, who assumes no responsibility for the opinions expressed or conclusions drawn by the author.

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[1] Stocken, L. A.; Peters, R. A.; Thompson, R. H. S.: British Anti-Lewisite. Nature, 156:616-619, 1945.

[2] Eagle, Harry: The Systemic Treatment of Arsenic Poisoning with BAL. J. Ven. Dis. Inf., 27:114-121, 1946.

"resuscitated" them by using BAL. After BAL and arsenic form the arsenite, they are excreted as such in the urine as shown by Eagle, et al., who performed assays of the urine of rabbits and found large increases in the arsenic level after arsenic and BAL had been administered.

BAL is not toxic in the recommended dosages but higher concentrations cause nausea, vomiting, headache, burning sensation of the lips, mouth, throat, eyes and teeth; generalized myalgia, constriction in the chest, and anxiety. Rise in the systolic and diastolic blood pressures has also been noted. Ephedrine sulfate is effective in preventing these untoward side-effects according to Tye and Siegel.[3] No deaths from the use of BAL have been reported in the literature.

BAL was first used in human subjects in 1943. Since that time Eagle[2] has treated over 200 cases of arsenic poisoning resulting from rapid treatment of syphilis, 55 of which were encephalopathies. Of these, 44 recovered. Of the 11 patients who died, treatment was delayed from 9 to 72 hours in 5, and 1 was treated inadequately. Bowman and Humphrey[4] reported one case successfully treated with BAL. In Eagle's series, slightly over 25 per cent of all arsenical reactions were encephalopathies. Of the 960 patients treated by the five-day continuous drip mapharsen method, Bowman[5] reported that 20, or .02 per cent, developed this complication. Eagle's fatality rate was 20 per cent, which is considerably below that of the pre-BAL era, when 50 per cent to 75 per cent of these patients died.

Arsenic encephalopathy usually occurs within 24 to 48 hours following the termination of five-day continuous drip therapy with 1,200 milligrams of arsenic. In Bowman's paper the longest interval noted was 6 days. According to that author, individuals of fair complexion, particularly those with red hair, are most susceptible to this complication and it is usually seen in the florid secondary stage.

The symptomatology follows a definite pattern of malaise, severe headache and convulsions, followed by rapid onset of gradually deepening coma, leading to death if therapy is not forthcoming. Diagnosis is made on the basis of history of therapy with arsenic, symptomatology, and recovery of arsenic in greater amounts than normal from the urine. In our patient the latter procedure was impossible since the patient was incontinent on admission. Early, prompt, and aggressive treatment with BAL is essential. Eagle states that if BAL is administered within 3 to 6 hours of the onset of symptoms, mortality will be below 15 per cent.

The dosage varies slightly with the weight of the individual.[6] In the 140 to 180 pound class, 2 cc. (200 milligrams) of 10 percent BAL in peanut oil are injected deep in the gluteal region every 4 hours for 48 hours, followed by 2 cc. twice a day for 7 to 10 days. Those individuals weighing less than 140 or more than 180 pounds are given 1.5 cc. or 2.5 cc., respectively, in the same manner. Supportive therapy in the form of repeated lumbar punctures, intravenous saline and 50 per cent sucrose solutions, and mild sedation may be necessary in the more severe cases. Bowman warns against overmedication with barbiturates or narcotics because of the danger of depressing already damaged central nervous system centers. Those patients who respond to BAL usually have completely recovered by the fourth day of therapy. It is interesting to note that there is no apparent interference by BAL with the anti-luetic influence of arsenic since these patients go on to the seronegative phase.

The case report follows:

J. O. L., a 24-year-old truck driver, was brought to the hospital on August 10, 1947, in a comatose condition. Past history revealed that he had received rapid, five-day, continuous drip treatment, with 1,200 milligrams of mapharsen elsewhere, from July 29 to August 5, for secondary syphilis which was manifested two months previously by a history of a penile chancre, generalized maculopapular rash, sore throat, and positive serology. On the second day after treatment the patient complained of generalized myalgia but continued to work. The day prior to admission he had such a severe headache as to require bed-rest. Four hours before admission he was found unconscious and undergoing a convulsive seizure.

Physical examination on admission revealed an acutely and critically ill, young, white, male adult who was comatose and could not be roused by questioning or stimuli. There were carpholagic movements of the hands and purposeless movements of the arms and legs. The temperature was 101 degrees F., the blood pressure 118/72, and the pulse 64. The head, neck, chest and abdomen were normal. The knee jerks, abdominal and cremasteric reflexes were absent. Kernig and Babinski signs were not present. The patient was incontinent of urine and feces.

Laboratory work, including spinal fluid analysis, was negative except for the strongly positive serology.

Administration of BAL in a dosage of 200 milligrams intramuscularly every 4 hours for 48 hours was instituted one-half hour after admission. An intravenous infusion of 1,000 cc. of 5 percent glucose in normal saline was given the first day and repeated the second. Twelve hours after admission the patient was still unresponsive but the restlessness had disappeared. Six hours later he recognized his sister at the bedside and from then on made an uneventful recovery. BAL was given twice a day, after the first two days, for the next six days for a total dosage of 4,800 milligrams. The abdominal and cremastric reflexes appeared on the second hospital day, while the knee jerks were found to be present on

[3] Tye, M.; Siegel, J. M.: Prevention of Reaction to BAL. J.A.M.A., 134:1477, 1947.

[4] Bowman, G. W.; Humphrey, P. E.: Cerebral Reactions Following Massive Five-Day Slow-Drip Syphilo-Therapy. Urologic and Cutaneous Review, 49:557-560, 1945.

[5] Bowman, G. W.; Humphrey, P. E.: Resume of Eight Hundred Cases of Early Syphilis Treated by Five-Day Slow-Drip Method. J. Ind. S. M. A., 38:259-268, 1945.

[6] V. A. Technical Bulletin 10-9, May 20, 1946.

the fourth. The patient's only complaint was a transient generalized myalgia for 15 to 30 minutes following each injection of BAL.

SUMMARY

(1) A brief resumé of BAL (2, 3-dimercaptopropanol) as to its mode of action in combatting arsenical reactions is given.

(2) Toxicologic aspects of the clinical use of BAL are discussed.

(3) A review of the literature on the use of BAL in arsenic encephalopathy is presented.

(4) A case report in which BAL was successfully used for treatment of arsenic encephalopathy is outlined.

RUPTURE OF THE JEJUNUM AND ILEUM DUE TO NONPENETRATING ABDOMINAL TRAUMA

REPORT OF FIVE CASES

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It is a recognized fact that a blunt object may strike the abdomen in such a manner as to produce laceration or rupture of the bowel without penetrating the abdominal wall or, in some cases, even abrading the skin. Because of the rapidly rising accident rate and the fact that a great number of persons are struck in the abdomen by a blunt force, it seems that a review of this injury is proper. Five cases of this so-called rare injury were treated at the Indianapolis General Hospital over a period of thirteen months. All of these presented either perforation or tear in the jejunum or ileum.

The incidence of intestinal injury is low considering the large number of abdominal injuries sustained each day. In a summary of all cases up to 1943, Tinsman and Barrow[1] found that the small bowel was the site of 90 percent of all perforations. W. L. Estes,[2] in reporting 2,217 consecutive accident cases of all types, found 32 with intestinal trauma—an incidence of 1.4 percent. One must always keep in mind the possibility that a seemingly minor injury may produce perforation of the intestine.

The mortality due to this type of injury has been exceedingly high, as death will occur in all cases not treated by surgery. Curtis[3] demonstrated this by his report of 116 cases, none of whom were operated upon, and all of whom died. Counseller and McCormack[4] summarized and tabulated all available case reports up to 1935, finding 1,313 cases in all. Operation was performed on 887 of these cases, with a gross mortality of 60.7 percent. Diagnosis was established at autopsy in 426, raising the total mortality to 73.4 percent. Since 1935, 163 case reports have been added to the literature as summarized by Poer and Woliver.[5] They found a decrease in mortality to 50.4 percent in cases where surgery was performed and to 61.3 percent in all cases. Gage,[6] in his summary of 85 cases, reported no recoveries in 45 cases who were not operated upon, and 17 recoveries in 40 cases on whom surgery was performed. His mortality was 73.4 percent. These and other high mortality figures are rather startling, particularly when we realize that early diagnosis in most of them, followed by prompt surgery, would have greatly reduced the number of deaths. It is for this reason that the importance of early diagnosis and treatment will be stressed. Delay in diagnosis and treatment are the most common causes of a fatal outcome.

The mechanism by which the intestine may be ruptured or lacerated seems fairly well established. When a blow is received suddenly by the abdomen, the muscles are not contracted.

* This material accumulated while Chief Resident in Surgery at the Indianapolis General Hospital, 1944 to 1946.

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[1] Tinsman, C. A., and Barrow, D. W.: Rupture of the Jejunum; Parachute Injury, War Med., 4:415-417 (Oct.) 1943.

[2] Estes, W. L.: In discussion, J. A. M. A., 118:11-15 (Jan.) 1942.

[3] Curtis, B. F.: Contusion of the Abdomen, with Rupture of the Intestine, Am. J. M. Sc., 94:321-349 (Oct.) 1887.

[4] Counseller, V. S., and McCormack, C. J.: Subcutaneous Perforation of the Jejunum, Ann. Surg., 102:365-374 (Sept.) 1935.

[5] Poer, D. H., and Woliver, E.: Intestinal and Mesenteric Injury due to Nonpenetrating Abdominal Trauma, J. A. M. A., 118:11-15 (Jan. 3) 1942.

[6] Gage, H.: Abdominal Contusions Associated with Rupture of the Intestine, Ann. Surg., 35:331-341 (Mar.) 1902.

This lack of splinting leaves the abdominal viscera unprotected and exposed to the full force of the assailing object. Three types of injury are possible: (1) the contused laceration, (2) the tear, and (3) the so-called "blowout." A special set of circumstances must obviously be present to produce any of these. The *contused laceration* is due to actual crushing of the intestine or mesentery against the unyielding vertebral column or bony pelvis. A short mesentery does not permit the viscus to slip out of the way of the attacking force. This is evidenced by the fact that most of these occur at points where the intestine is relatively immobile: namely, the distal portion of the duodenum, the proximal jejunum, and the ileum near the ileocecal valve. The *tear* is seen most frequently at the mesenteric border. Veal and Barnes[7] have advanced a logical explanation that it is due to a continued force being applied to the bowel after its mesentery has been stretched to its limit. There is a pulling-away of the mesentery with a resulting tear of the intestine at its mesenteric border. Here, also, a short mesentery and a force acting in just the right way are necessary. The "blowout" is doubted by some men[5] as being possible as a result of a blunt force. We feel that it does occur. We saw it in two of the cases at the Indianapolis General Hospital, and should like to advance the following as one of the possible explanations of the mechanism: If an already distended knuckle of intestine that is relatively immobile is pressed against the vertebral column so that the afferent and efferent limbs are closed, and with the force continuing towards the apex of the loop, the intraluminal pressure would be greatly increased and would produce the blowout. Another factor which probably plays a role in producing this lesion is the sudden manner in which the loop of intestine is subjected to the distending force. The same amount of distention, if gradually applied, might not produce this blowout. Those that were seen at the Indianapolis General Hospital were in the jejunum where the terminal duodenum and proximal jejunum formed the loop described above. We saw a small hole on the anterior surface of the jejunum near the ligament of Treitz with everted mucosa and no evidence of trauma to the adjacent intestinal wall. It is hard to imagine such a lesion occurring in any other way, particularly since the blunt object causing the damage is always larger than the width of the intestine. In all of the above assumptions as to the mechanism of the three types of injury, it is evident that a definite chain of circumstances is necessary. This explains why, with so many abdominal blows being received every day, the incidence of perforated bowel is still low.

Early diagnosis is essential to proper treatment. After the first eight hours have elapsed there is a rapid rise in mortality with each succeeding hour of delay. The early signs and symptoms depend upon the location of the perforation, the composition of the leaking intestinal contents, and the amount of spilling. The typical patient, when seen about an hour after injury, will be restless and apprehensive, breathing rapidly and superficially, and complaining of severe abdominal pain. It is usually a constant, dull, aching pain, not colicky in nature. The pain is generalized, but may be most severe in the epigastrium or suprapubic region. If the perforation is in the jejunum, the epigastrium will be the site of the most intense pain, and if in the terminal ileum with gravitation of the fluid into the pelvis, suprapubic pain is outstanding. If the diaphragmatic peritoneum is irritated there will be pain on respiration, with resulting splinting of the diaphragm and alteration of the normal thoraco-abdominal respiratory rhythm. There may be referred pain from the diaphragm to the tops of the shoulders. When present it is a most helpful sign.

Shock is not an outstanding symptom in these cases and when present is usually due to other injuries or intra-abdominal hemorrhage from torn or crushed vessels in the mesentery. Hunt and Bowden[8] and others have stressed the careful observation of the pulse. It may be normal early, but a steady rise in rate is seen in nearly all cases. Cope[9] has stated that in the absence of chest or renal damage he would explore the abdomen, even though pain were absent or slight, in the face of a steadily rising pulse rate, especially if the patient were restless and listless.

Examination of the abdomen will reveal a flat abdomen that does not move with respiration. Distention develops late, with general peritonitis and ileus. Palpation will reveal an abdomen that is generally tender directly and on the rebound. Abdominal rigidity is variable, but most cases will present a board-like rigidity not unlike that seen in perforation of a duodenal or gastric ulcer. This is especially true if the perforation is duodenal or jejunal. Percussion of the abdomen is recommended, to check for shifting dullness in the flanks and diminution or absence of liver dullness. The presence of these phenomena is quite helpful for it reveals evidence of free air and fluid within the abdominal cavity. In most of the case reports to date these signs have been absent. One should not be lulled into a false sense of security if they are not found.

In the examination of any acute abdomen we feel that auscultation is a valuable aid, especially in these patients. Since slowing of peristalsis gives decreased sounds, a silent abdomen is indicative of a paralytic ileus, a protective mechanism

[7] Veal, J. R., and Barnes, E. B.: Rupture of Intestines from Nonpenetrating injuries of Abdomen, Med. Ann., District of Columbia, 10:259-263 (July) 1941.

[8] Hunt, G. H., Bowden, J. N.: Rupture of the Intestine by Nonpenetrating Trauma of the Abdominal Wall; Report of Cases, Arch. Surg., 49:321-326 (Nov.) 1944.

[9] Cope, V. Z.: The Early Diagnosis and Treatment of Ruptured Intestine, Proc. Roy. Soc. Med., Surgical Section, 7:86-107, 1914.

of an injured intestinal tract. The silent abdomen if found early will probably be due to wide spillage, and if found late will probably be due to peritonitis. One must remember that in some instances the leak may be quickly sealed and contamination minimal at first. A rupture of the lower ileum may gravitate to the pelvis and produce only localized irritation, and in this case bowel sounds may be heard in other parts of the abdomen, leading to a false sense of security. Bunch[10] points out that if hemorrhage is intraluminal the borborygmi are increased, but are decreased if hemorrhage is intraperitoneal; and almost immediately a silent abdomen will be found. A traumatic abdomen with persisting or early return of normal peristalsis and borborygmi gives rather certain assurance of absence of intraperitoneal damage.

The x-ray gives us the only positive sign of a perforated intestine when it reveals the presence of free air beneath the diaphragm. The frequency of this finding was not definite. Ficarra[11] has noted that it is seen most frequently in perforations of the duodenum and jejunum. This is due to the fact that the stomach contains free air which may be liberated when a perforation occurs in its vicinity. The lower ileum normally does not contain gas in any large amount so free air is much less likely to be liberated. When other injuries make it unwise or impossible to place the patient in the upright position, it is helpful to place the patient in the right lateral decubitus position for the abdominal picture. If free air is present it will be seen outlining the lateral border of the liver, the right lateral abdominal wall, and the insertion of the diaphragm. Since free air is not always seen, one should not place any great significance in its absence in a patient in whom a perforation of the intestine is suspected.

Nausea and vomiting are important signs, and all vomitus should be inspected. Veal and Barnes[7] state that vomiting occurred in 90 percent of all cases reported. If blood appears in the vomitus, it is an indication of trauma in the upper gastrointestinal tract. Cope[9] has stressed the value of rectal examination in doubtful cases. Gravitation of irritating fluid in the pelvis will produce a tenderness of the pelvic peritoneum that is significant.

The preoperative preparation of the patient consists chiefly of combating shock and dehydration, if present. If intra-abdominal bleeding is suspected, it is the practice here to give whole blood as indicated preoperatively and then to give a continuous transfusion of blood or plasma during surgery. The shock incident to surgery has been greatly reduced by this method.

The choice of anesthetic is elective, but a general anesthetic of gas, oxygen, and ether, or plain open-drop ether has been preferred in this hospital. The incision to be used depends upon the expected pathology and the surgeon, but when the exact diagnosis is doubtful, it is felt that the paramedian incision, equidistant above and below the umbilicus, is desirable. The character of the fluid found on opening the peritoneum can then serve as a guide to exploration and the incision can be extended easily upward or downward. Simple closure of the perforation is preferred; but if this is impossible without danger of producing an obstruction, or if the blood supply is impaired, resection and anastomosis must be done. The abdomen is closed without drainage unless bacterial peritonitis is already established. One should not be content with finding one perforation since multiple perforations may be present. Complete exploration of all abdominal viscera is essential.

Postoperatively, continuous gastric suction through a Levine tube is maintained until the return of borborygmi signifies the beginning of peristalsis. Intravenous fluids should be given in the amounts necessary to maintain a urinary output in excess of 1,000 cc. It has been the practice here to give intravenous sulfadiazine in sufficient quantity to maintain a blood level of 10 mg. percent. Feeding is begun gradually after the Levine tube is removed, depending on the extent and nature of the damage. The value of whole blood transfusions postoperatively cannot be overemphasized.

It is the practice at this hospital to keep all patients with a traumatized abdomen under close observation and to examine them at frequent intervals. The blood pressure, temperature, pulse, and respirations are checked every 30 minutes. All physical findings and complaints of the patient are checked and studied repeatedly. An upright roentgenogram of the diaphragm is taken. A catheter is passed and the urine examined for blood. The white cell count is taken at hourly intervals; and by means of the copper sulphate test[13] the hemoglobin, hematocrit, and plasma proteins are studied hourly. Shock is always anticipated and whole blood is made immediately available. This routine has proved most helpful in deciding which plan to adopt—immediate surgical exploration or watchful waiting.

The following group of Indianapolis General Hospital cases is presented. General information is presented in summary in Table I, and Table II

[10] Bunch, J. R.: Intestinal Perforations Due to Nonpenetrating Abdominal Trauma, South. M. J., 37:717-722 (Dec.) 1944.

[11] Ficarra, B. J.: Traumatic Perforations of the Small Intestine due to Nonpenetrating Abdominal Injuries, Survey of 18 cases, Surgery, 15:465-475 (Mar.) 1944.

[12] Kohlstaedt, K. G., and Page, I. H.: Hemorrhagic Hypotension and Its Treatment by Intra-Arterial and Intravenous Infusion of Blood, Arch. Surg., 47:178-191 (Aug.) 1943.

[13] Phillips, R. A., Van Slyke, D. V., et al.: The Copper Sulphate Method for Measuring Specific Gravity of Whole Blood and Plasma. From the U. S. Navy Research Unit at the Hospital of the Rockefeller Institute for Medical Research.

TABLE I. GENERAL INFORMATION

Case	Adm.	Rel.	Hosp. days	Duration of Injury	Mode of Injury	Findings at Surgery	Course	Result
1.	12- 9-44	2-12-45	13 mos.	1 hr.	Hit by auto	2 complete transverse lacerations of jejunum and multiple rents in mesentery. Tear in cecum.	Moderately stormy. Bowel obstruction necessitated a resection 7 mos. later.	Recovered
2.	7- 2-44	7-11-44	9	6 hrs.	Hit in abdomen by a softball during game.	Perforated jejunum near ligament of Treitz.	Smooth.	Recovered
3.	6-24-45	8-10-45	46	24 hrs.	Kicked in abdomen during altercation.	Laceration of ileum about 3 ft. from ileocecal valve.	Stormy. Gen. peritonitis. Wound infection.	Recovered
4.	5- 9-44	5-29-44	20	7 hrs.	Fell prone from tree striking abdomen on rock.	Perforated jejunum near ligament of Treitz.	Smooth.	Recovered
5.	8- 5-44	8-18-44	13	5 hrs.	Run over by truck.	Perforated jejunum near ligament of Treitz.	Smooth.	Recovered

TABLE II. SIGNS AND SYMPTOMS

Case	Abdominal Examination	Shock and B.P.	Tem.	Pulse	Resp.	W.B.C.	Other Injuries	Vomiting	X-Ray Findings
1.	Mod. rigidity. Silent. Dull to percussion. No distention.	Deep shock. No. B. P.	97	140	38	No count prior to surgery	Compound tibia and fibula, left. Fract. tibia, rt.	None	No x-ray
2.	Boardlike rigidity. Silent. No findings to percussion. No distention.	No shock. 130/80	101.2	118	28	19,800	None	Vomited	Free air beneath diaphragm.
3.	Boardlike rigidity. Hypoactive borborygmi. Suggestive shifting dullness both flanks. Mod. distention.	No shock. 150/90	100.6	84	36	5,200	None	None	Suspicion of free air beneath diaphragm.
4.	Boardlike rigidity. Hypoactive sounds. No findings to percussion. No distention.	No shock. 118/80	100.2	120	30	23,900	Colles's fracture, left.	Vomited	Free air beneath diaphragm.
5.	Boardlike rigidity. Silent. No findings to percussion. No distention.	No shock. 170/90	100	96	40	14,450	Comminuted Pelvis	None	Negative

presents a summary of outstanding signs and symptoms. These patients were admitted to the hospital during the period from May 9, 1944, to June 24, 1945, inclusive. It is unusual that five of these cases were seen in a civilian hospital in a period of thirteen months.

Case 1.

On December 9, 1944, a white female, age 37, was hit by a speeding automobile and subsequently brought to us in profound shock. The blood pressure was unobtainable and, as determined by the copper sulphate method,[13] the hematocrit was 32, hemoglobin 8.2 gm., and plasma proteins 4.3 gms. There were abrasions about the face

and over the left eye The chest was unrevealing. The abdomen was splinted and dull throughout to percussion. No bowel sounds were revealed by auscultation. There was a fracture dislocation of the right knee and a compound fracture of the left tibia and fibula. There was no sign of contusion or injury to the abdominal wall.

In the admitting room 1,000 cc. of plasma were given rapidly while surgery was being prepared. An anesthetic of open-drop ether was begun 30 minutes after admission. On opening the abdomen a large amount of free blood was encountered. The liver and spleen were found to be intact. The jejunum was found to be divided completely in a transverse plane in two places about 15 cm. apart. There were corresponding large rents in the mesentery at these points. This section of jejunum was resected and single layer, end-to-end anastomosis was performed. Further exploration revealed more large rents in the mesentery so severe that three areas of ileum were definitely deprived of all blood supply. These three sections of cyanotic ileum were also resected. Four resections and anastomoses were necessary. The mesentery and a tear in the cecum involving all layers except the mucosa were then repaired. The abdomen was drained through a stab wound in the left flank. The compound fracture was debrided and irrigated with saline followed by local application of sulfanilamide crystals. Buck's extension was applied to the leg by skin traction.

Immediately after beginning the anesthetic, the right radial artery at the wrist was cannulated with a 14-gauge cannula directed against the arterial flow. Shock was then treated after the method of Kohlstaedt and Page,[12] by intra-arterial infusion of fluids. She received by this method 2,000 cc. of red cells suspended in saline, 500 cc. of 100 percent plasma, 500 cc. of whole blood, and 1,000 cc. of 5 percent dextrose in normal saline. She had been given 1,000 cc. of plasma prior to the above fluids. Her systolic pressure on leaving surgery was 118 mm. of Hg. Chemotherapy, consisting of penicillin and intravenous sulfadiazine, was begun immediately.

At 10:00 a.m. the following morning, as determined by the copper sulphate method,[13] her hemoglobin was 14.6 gm., plasma proteins 6.2 gm., and hematocrit 44. The blood pressure was 125/90 and the temperature was 101.2°, rectally. The urine was grossly bloody on leaving surgery and remained so for four days; it became clear on the sixth day. Continuous Levine suction was successful in combating her ileus, and on the fourth day bowel sounds were heard.

On the sixth day the skin of the patient was definitely icteric. The serous drainage from her abdomen also appeared bile-stained. Serum bilirubin was 3.1 and urine urobilinogen was reported 1+ and three days later 4+. The van den Bergh test showed 70 percent direct reaction, 95 percent of which developed in the first ten minutes. There was bile in the Levine tube from the stomach and bile in the urine; so it was evident that this was an intrahepatic jaundice. This jaundice gradually disappeared and was no longer visible on the twentieth day after its onset.

At no time during the immediate postoperative course did her temperature rise higher than 102° rectally. It was normal on the thirty-first hospital day. Bowel movements began on the tenth day after admission. Her course gradually improved from that time on.

The only surgical complication arose seven weeks after admission, when it became evident that a partial bowel obstruction had developed. This was relieved by use of a Miller-Abbott tube, but symptoms persisted until a laparotomy was performed on June 15, 1945, at which time an almost total obstruction was found near the ileocecal valve at the site of one of the anastomoses. This was resected and a side-to-side anastomosis performed. Adhesions in the abdomen were minimal considering the tremendous trauma her abdominal viscera had sustained. From that time on she gained weight and improvement was rapid.

Infection developed in the compound fracture and healing was retarded, but this has been overcome and the patient is now ambulatory and in good health.

Case 2

A white male, age 17, was playing softball, and while sliding for home base, was struck in the abdomen by the catcher. He continued to play an inning and a half before he noticed abdominal pains. The pain gradually became more intense and by midnight was so severe that his parents brought him to the hospital. En route he vomited bitter, green fluid.

On admission we saw an apprehensive boy obviously in pain. Physical examination revealed the following: The abdomen was generally tender, rigid to palpation, and did not move with respirations. The maximum tenderness seemed to be in the mid-episgastrium. Percussion was uninforming, but auscultation revealed a silent abdomen. There was no superficial trauma.

An upright film of the diaphragmatic area revealed a minute amount of free air beneath each leaf of the diaphragm. The blood pressure was 130/80; pulse, 118; temperature, 101.2°; respiration, 28; white cell count, 19,800; urinalysis, normal.

Abdominal exploration two hours after admission and seven hours after injury revealed a blown-out rupture of the jejunum 5 mm. in diameter and 6 inches from the ligament of Treitz. Spilling had been minimal. It was repaired with a purse-string suture reinforced with interrupted Lembert silk sutures. The abdomen was closed without drainage.

The postoperative course was uneventful. He was ambulatory and released from the hospital on the tenth postoperative day.

Case 3.

During an alley fight a colored male, age 40, was kicked in the abdomen several times. He walked home and began to have rather severe abdominal pain, most intense in the suprapubic region. He came to the hospital the following night, 24 hours after injury, because of this abdominal pain. He also complained of shoulder-top pain.

Examination was normal except for the abdomen, which was moderately distended and showed no evidence of trauma. The diaphragm was splinted and the abdomen was board-like in its rigidity. He seemed most tender in the right lower quadrant. Percussion of the abdomen revealed dullness in both lumbar regions with a questionable shift. Bowel sounds were heard, but were hypoactive. X-ray revealed a homogeneous density of the abdomen with loops of gas and fluid-distended large and small bowel. There was questionable free air beneath the diaphragm.

The blood pressure was 150/90; white cell count, 5,200; temperature, 100.6°; pulse, 84; respiration, 36. Urinalysis showed 20 to 25 red cells per high power field.

The patient was given 500 cc. of plasma and then taken to surgery. The abdomen was opened and cloudy purulent fluid found. All loops of visible intestine were inflamed and covered with a purulent exudate. A traumatized jagged laceration of the ileum near the ileocecal valve was found and repaired without resection. Other contusions of the ileum and mesentery were found, but no repair was indicated. Penrose drains were brought through a stab wound in the McBurney area.

Briefly, his treatment consisted of nasal oxygen, continuous gastric suction, intravenous fluids and whole blood, sulfadiazine, and vitamins B and C. The temperature was normal on the twelfth day. A wound infection prolonged his hospital stay, but he was released in an ambulatory condition on the forty-sixth postoperative day.

Case 4

A white female, age 15, was brought to us complaining of generalized pain in the abdomen, pain in the left wrist, and vomiting.

The story was that she fell from a tree, landing prone, striking her abdomen on a rock. She injured the left wrist in the fall. From the time of injury she had had severe abdominal pain, most intense about the umbilicus. She had vomited twice, and the mother stated that there was blood in the vomitus.

The blood pressure was 118/80; temperature, 100.2°; pulse, 120; respiration, 30.

The patient was found lying on her back with the thighs flexed, and she was quite apprehensive. Respirations were shallow and of thoracic character. Abrasions were found on the chin, left knee, and a small area of redness was noted at the left costal margin in the nipple line. The left wrist was swollen, and there was limitation of motion. The chest findings were normal. The abdomen was rigid, and did not move with respirations. Palpation revealed generalized tenderness, most marked at the umbilicus and in the epigastrium. Percussion was uninforming. The bowel sounds were hypoactive on admission and were totally absent one hour later.

The white cell count was 23,900 and the urine was normal except for 1+ albumin.

X-ray film taken in an upright position revealed free air beneath the left leaf of the diaphragm, outlining the cardia of the stomach.

Abdominal exploration seven hours following injury revealed a traumatic rupture of the jejunum near the ligament of Treitz. This was repaired and the abdomen closed without drainage.

Her postoperative course was uncomplicated and she was released to her home on the twentieth day.

Case 5

A white male, age 19, was brought to us immediately after he had been run over by a truck. It was claimed by a witness that a wheel passed completely over his body. On admission he was complaining of pain in the abdomen, pain in the chest synchronous with respirations, and pain in the right hip.

Examination revealed a person in much pain. Respirations were rapid and the diaphragm was splinted. The lungs were clear, but bony crepitus was noted over the lower left ribs. Extending from the right upper abdominal wall downward over the right upper thigh was a large, second-degree abrasion into which much dirt had been ground. The entire abdomen was rigid and there were no bowel sounds. Tenderness was generalized and percussion of the abdomen was uninforming. Movement of the right leg produced severe pain in the right hip joint.

Upright roentgenogram of the diaphragm was negative for free air. The pelvis was the site of multiple fractures.

The blood pressure was 170/90; white cell count, 14,450; hemoglobin, 14.6 gm.; temperature, 100°; pulse, 96; respiration, 40.

The abdomen was opened four and one-half hours after injury and a small contused perforation of the jejunum six inches from the ligament of Treitz was found and repaired. There had been minimal spillage from the viscus. The abdomen was closed without drainage.

His postoperative course was uneventful. He was released on the thirteenth postoperative day to the Veterans Administration for treatment of his fractured pelvis.

SUMMARY

1. A discussion concerning rupture of the small intestine and mesentery by nonpenetrating abdominal trauma is presented, giving incidence, mortality, mechanism, types of injury, and diagnosis.

2. The diagnostic findings are discussed in detail.

3. Preoperative preparation, anesthesia, surgery, and postoperative care are dealt with.

4. Five cases of perforated small bowel due to nonpenetrating abdominal trauma were seen by the authors in a period of thirteen months at the Indianapolis General Hospital and are presented.

5. Early diagnosis, followed by prompt surgical intervention, are essential if the high mortality rate due to this type of injury is to be reduced.

PHYSICIAN'S EXPENSES RISE 40 PERCENT

The average independent physician in 1947 spent $2,000 more to practice than he did in 1943, a jump of 40 percent. During this same interval his net income increased only 23 percent, according to *Medical Economics*.

William Alan Richardson, the magazine's editor, noted that non-salaried doctors' professional expenses averaged $7,200 last year. This sum was triple the average amount spent in 1935, ($2,528) and double the 1928 average of $3,523, Mr. Richardson pointed out.

In a breakdown according to geographic areas, Mr. Richardson revealed that physicians in the Far West had the highest average professional expenses. In spite of that fact, he added, their net income topped that of doctors in other regions. Operating costs were lowest in New England and the Middle Eastern states, (including New York). So were the average net incomes of the doctors in those areas.

The survey disclosed that expenses of the average low-income doctor were relatively much higher than those of the high-income physician, ranging from 53.9 percent of gross for the former to 36.8 percent of gross for the latter.

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THE JOURNAL'S PLATFORM

1. **Preservation of American Medicine through voluntary service to the sick.**
2. **Advocating full-time county or district health officers, locally appointed.**
3. **Restoration and preservation of our natural waters and resources.**
4. **Maintain the present high standard of the Indiana University Medical Center, combining the full medical course in Indianapolis.**
5. **Elimination of diphtheria and smallpox through immunization and vaccination.**
6. **Support of the state-wide campaign against undulant fever.**

Editorials

DAVID D. OAK, M.D.

DR. DAVID D. OAK, of LaCrosse, the General Practitioner of 1948, was presented with an oil painting in token of his selection as the outstanding general practitioner of the Hoosier state. The painting is a Brown County landscape by Georges La Chance, and is especially suitable as a token of affection and esteem. Dr. Oak's name will be presented by the state medical association in nomination for the General Practitioner Award of the A.M.A. While Indiana doctors are conscious that there are many of their number whom they would be proud to select for this honor, still only one individual may be selected each year. We may be sure that Doctor Oak will be a most worthy candidate for consideration at the interim session of the A.M.A. His appearance at the Annual Dinner and his speech of acceptance would leave little doubt as to his qualifications as an outstanding general practitioner.



David D. Oak, M.D.

In a short space of time he expressed his thanks and in a few sentences summarized the highlights of his lifework. The ingredients of a successful practice are not too complicated. Doctor Oak acknowledged his gratitude for the assistance and forbearance and love of his wife. He spoke of the long hours of hard work, the difficult travel, and the occasional bitter disappointments. "And yet," he says, "I could never do anything else." His lifework, as he looks back on it and as he continues it, is a source of pleasure and satisfaction, because as he expresses it, "I like people." Had he spoken for an hour he could not have exemplified the essentials of a happy and successful practice in any better fashion. For him the keystone of his lifework is this one attribute, "I like people."

THE NINETY-NINTH ANNUAL MEETING

THE ninety-ninth annual session of the Indiana State Medical Association held at Indianapolis October 26-28 is now history, and plans already are under way for the next state meeting—the Centennial Celebration—at Indianapolis, beginning September 26, 1949.

This year's convention brought many such comments as "the best ever." The scientific program was unusually good and, on the lighter side, the stag party and stage show were "A-Number One." The technical and scientific exhibits drew large crowds.

The registration set a new record. A total of 2,681 persons registered, of whom 1,436 were members of the association. The previous record was in 1946, when 2,240 attended the state meeting.

Dr. Claude S. Black of Warren, Huntington County, was elected president-elect by the House of Delegates. Doctor Black is a veteran member of the Council. He was unopposed, as were all others elected. Dr. A. F. Weyerbacher of Indianapolis was re-elected treasurer, and all delegates to the American Medical Association House of Delegates and the alternates were re-elected, as follows: Delegates—Dr. Homer G. Hamer of Indianapolis and Dr. A. S. Giordano of South Bend; alternates—Dr. Karl R. Ruddell of Indianapolis and Dr. E. S. Jones of Hammond. French Lick was selected for the place of the 1950 meeting and the dates, set by the Council, are September 25, 26 and 27, 1950.

The delegates approved a motion introduced by Dr. Abraham M. Owen of Bloomington, secretary of the Owen-Monroe County Medical Society, "approving the mass immunization of all willing population of the state, utilizing the donated services of Indiana physicians and working under the direction of an appropriate existing committee," in the event of a national emergency. Doctor Owen said, in offering his motion, that "organized medicine is at present standing trial at the bar of public opinion. Our defense is, and shall be, in the positive as well as the negative phase."

A motion recommending that the by-laws be changed to include alternate councilors, who would serve when the regular councilor could not attend to his duties, was adopted. It will come up again next year when the new by-laws are presented for final action.

After an extended debate, the delegates adopted a resolution submitted by delegates of the Indianapolis Medical Society, placing the association "on record as requesting that the American Medical Association no longer give its actual or implied approval of organizations which demand compulsory attendance at medical meetings." The Indiana delegates were directed to present the resolution to the A.M.A. House of Delegates which met earlier this month in St. Louis.

The delegates passed a resolution approving "Diabetes Week," December 6-12, which is sponsored by the American Diabetes Association, in behalf of the undiscovered and untreated diabetic.

Recognition of the many years of service by Dr. E. M. Shanklin of Hammond, editor of THE JOURNAL for sixteen years, and a past president, was incorporated in a resolution adopted by the delegates. Doctor Shanklin was elected Editor Emeritus by the Council. The resolution said, in part, "under his wise and sagacious direction during the sixteen years of editorship of our JOURNAL it advanced to become second to none in this broad land." Dr. Frank B. Ramsey of Indianapolis, associate editor, was elected editor, and Dr. A. W. Cavins of Terre Haute was named associate editor. They will begin their duties January 1.

The sections met after the general scientific program on October 27, and elected officers, as follows:

Section on Surgery: Chairman, Harold D. Caylor, M.D., Bluffton; Vice-chairman, Hawthorne C. Wallace, M.D., Crawfordsville; Secretary, Joseph H. Clevenger, M.D., Muncie.

Section on Medicine: Chairman, Stanton L. Bryan, M.D., Evansville; Vice-chairman, Paul J. Fouts, M.D., Indianapolis; Secretary, Marshall I. Hewitt, M.D., South Bend.

Section on Ophthalmology and Otolaryngology: Chairman, Warren R. Hickman, M.D., Logansport; Vice-Chairman, Dillon D. Geiger, M.D., Bloomington; Secretary, Edwin W. Dyar, M.D., Indianapolis.

Section on Anesthesia: Chairman, Edward F. Bloemker, M.D., Indianapolis; Vice-chairman, William B. Adams, M.D., Muncie; Secretary, Richard E. Edmondson, M.D., Terre Haute.

Section on General Practice: Chairman, William R. Tindall, M.D., Shelbyville; Vice-chairman, Clarence H. Rommell, M.D., LaFayette; Secretary, Lester D. Bibler, M.D., Indianapolis.

Section on Obstetrics and Gynecology: Chairman, Dudley A. Pfaff, M.D., Indianapolis; Vice-chairman, David A. Bickel, M.D., South Bend; Secretary, Edgar L. Engel, M.D., Evansville.

Most of the scientific papers presented at the General Assembly will be printed in subsequent issues of THE JOURNAL. Minutes of the House of Delegates and Council meetings are printed elsewhere in this issue.

Approximately thirty physicians participated in the trapshoot, the winners being: Veterans class—Dr. Harold B. Cox, Indianapolis, first; Dr. John Lansford, Redkey, and Dr. Earl E. Johnson, Covington, tied for second; Dr. Harold C. Adkins, Indianapolis, and Dr. Claude M. Donahue, Carmel, tied for third; and Dr. L. A. Ensminger, Indianapolis, Dr. Russell B. Engle, Winchester, and Dr. Marvin McClain, Scottsburg, all tied for fourth.

Novice Class—Dr. Ralph V. Everly, Indianapolis, and Dr. Mark M. Moran, Portland, tied for first;

Dr. Myron H. Nourse, Indianapolis, second; Dr. Herman T. Combs, Evansville, third; and Dr. Ray Tharpe, Indianapolis, fourth.

The balmy skies brought out sixty-one golf players. Principal winners were: Low gross—Dr. Joseph E. Walther, Indianapolis, (74) first; Dr. Howard W. Beaver, Indianapolis, (77) second; Dr. Edwin R. Eaton, Indianapolis, (78) third; Dr. Lowell W. Painter, Winchester, (79) and Dr. Wayne Carson, Indianapolis (79) tied for fourth; and Dr. Kenneth T. Knode, South Bend (80) and Dr. George A. May, Madison, (80) tied for fifth.

Dr. Thomas A. Brady, Indianapolis, won the contest for golfers nearest to the pin, and Dr. Howard W. Beaver won the prize for the longest drive.

Nearly five hundred members and guests attended the annual dinner on Thursday evening. Dr. David D. Oak, of La Crosse, who was elected as the "General Practitioner of the Year" by the delegates, was presented with a beautiful painting by Georges La Chance, Brown County artist. Many of the thirty-eight physicians who this year had completed fifty years of the practice of medicine were present at the dinner and received their certificates of distinction and gold pins. Dr. Jon N. Kelly, of La Porte, responded for the "Fifty Year Club" members. In addition to the names of the club members printed in the November issue of THE JOURNAL, awards went to Dr. Lafayette T. Cox, of Indianapolis, and Dr. Albert W. Collins, of Anderson. A certificate of merit was presented to Dr. Floyd T. Romberger, of LaFayette, president of the association in 1947. The principal speaker was Dr. Ernest E. Irons, of Chicago, president-elect of the American Medical Association.

"FIFTY YEAR CLUB"

THE "Fifty Year Club" celebrated its first anniversary during the Annual Meeting by adding to its membership and records the names and accomplishments of thirty-eight Indiana physicians. The incoming members whose names were presented in the November issue of this journal were honored by the state medical association at the Annual Dinner. Engraved certificates of membership signifying fifty years of service to the practice of medicine, and the association's "Fifty Year Club" lapel emblem, were presented to each new member by President Nafe. Response on behalf of the new members was made by one of their number, Dr. Jon N. Kelly of LaPorte.

Membership in this exclusive society now numbers 242. During its inaugural last year 204 members of the state association were honored by becoming the founding members. Many of the original group had exceeded fifty years of practice. Each year as Indiana doctors meet in annual session it is to be expected that the "Fifty Year Club" will become a tradition in which we may all take pride and by which we may salute our elders and make public recognition of the esteem in which they are held by their colleagues and many friends. Each year we may take inspiration from the example set by these men and women, many of whom are still in active practice.

Editorial Notes

United Medical Service, the Blue Shield plan for New York City, enrolled its millionth member in September of this year. The New York City "Doctors' Plan," therefore, becomes the second voluntary prepayment medical service plan to exceed a membership of 1,000,000. Michigan Medical Service achieved this goal earlier in 1948.

Physicians of Indiana and their office employees should be warned of the recent appearance in the state of a salesman who claims to be the representative of a Chicago business firm, who takes orders for uniforms and accepts deposits and in some cases full payment, but whose merchandise never arrives. The man is equipped with what appears to be a bona fide order book of the Michael Lewis Company, and deals chiefly in nurses' uniforms. The firm whose name appears on the order has stated that he is not in their employ.

The New York State Journal of Medicine has recently called attention to the fact that the term "organized medicine" carries to the public a distinctly different meaning than that which is intended by its medical users. Physicians have always referred thusly to that part of medicine which is concerned with a group effort toward the advancement of medical science and the betterment of medical practice. To them the term is synonymous with working unselfishly for the common good. However, the New York Journal finds that the word "organized" has acquired an unsavoriness with the public, possibly because of some organized groups which have been self-seeking. Because of this situation, the use of the term "medical profession" is suggested as a substitute.

Dues Paid up 100% for 1949:

Carroll County

Clay County

President's Page

THE FUTURE OF MEDICINE

PHYSICIANS everywhere probably are as perplexed by the unexpected results of the recent election as everyone else is. We had been led to believe by every forecaster that Thomas E. Dewey would be the next President and that there would be no immediate threat of national compulsory health insurance. Instead, Mr. Truman has been returned to office. He made compulsory health insurance one of his major promises, and now every physician and many thoughtful citizens are wondering what the prospects are of such legislation being enacted.

Already Oscar Ewing, Social Security Administrator, is pushing the plan very hard. In his public statements, since the election, he is outlining a national health program with compulsory federal health insurance as a major feature.

The paramount question is what position the elected Democratic representatives in both the House and Senate will take on this very important issue. Nothing was stated in the national Democratic platform that would require conscientious senators or representatives to support such a program.

In speaking of national health the Democratic platform states, "We favor the enactment of a national health program for expanding medical research, medical education, and hospitals and clinics." Compulsory health insurance is not a part of the platform, but was the promise of Mr. Truman himself. It may be argued that since Mr. Truman was elected his promises were given majority approval. In general that is true, but since many issues were discussed it does not follow that he was given a mandate to carry out all of these objectives.

Certainly it is imperative that the public be fully informed of the known failures of socialized medicine in every country where it has been tried, and if they are aware of the facts there cannot be any question concerning what course they will wish their government to pursue.

On November 5 President Herman B Wells gave the faculty and students of Indiana University's Schools of Medicine and Dentistry his first-hand observations on the failure of socialized medicine in prewar and postwar Germany. The wage earner contributes between 5 and 6 percent of his salary for medical care whether he gets it or not, and the care is vastly inferior to what is available in private practice. Doctors' fees are so low that to increase their income they rush patients through their offices like cattle. Moral standards and professional ethics have deteriorated. As Dr. Wells put it, "Medicine is no longer a profession, but a business based on cold calculation, and the principles of mass production. Gone is the interest in performing thorough, scientific, honest work. Socialized medicine has worked by and large to the detriment of the patient, the doctor, and medical science. Research has practically stopped. Medicine has become a political plum. The formerly great medical centers and colleges in Germany are no longer in the forefront of medical science. The center of gravity has shifted to the free medical system of the United States."

This is the story that has been often told, but when it is given from personal observations of a prominent educator like Dr. Wells, it should have added significance. It must be told repeatedly to all of our people, for they are the ones who suffer under such a system.

In Britain, where socialization has just started, the signs of deterioration have already developed. The Indianapolis Star, in a very fine editorial, recently pointed out that this must not happen here, where "we have the finest hospitals, research centers, medical schools and general medical care in the world."

If there ever was a time when the medical profession must tell the true story it is now. We have many friends among leading newspapermen and Democrats and Republicans alike. We force a real challenge to lead the fight against regimentation of the practice of medicine. Every physician would agree that our medical care program can be improved and that the broad objectives stated in the Democratic platform are worthwhile, but this cannot be done by socialization of medicine.

On December 31 my year as president ends and Dr. A. P. Hauss assumes the presidency of this association. I bespeak for him and the other officers your fullest cooperation. I know that he and Dr. C. S. Black will furnish excellent leadership for the next two years. Each has served the association faithfully and well over a long period of years. They possess mature judgment, high ideals, and seasoned experience in medical affairs. Under their leadership I know that this association will continue its valuable service to the people of Indiana, and I sincerely hope that greater progress will be made in all that is worth-while during the immediate years ahead.

In these rapidly changing times many serious obstacles may confront our profession. Major upheavals may occur in the methods of distribution of medical care. Yet I cannot help but believe that as long as physicians give good, conscientious medical care to our people, they will be grateful and will treat the medical profession kindly. In order that scientific medicine may continue its advances, strong medical organization is essential. Again I urge that the younger members of the medical profession assume a more active role in the conduct of the medical affairs and add a stimulating virility to medical organizations.

It may not be my lot to be as active in the affairs of this association as I have been while I served as chairman of the Executive Committee and as president. However, I will always maintain an active interest in this association, and strive for its improvement. No ex-president worthy of the high honor would do less.

Again I wish to thank the officers, the many committee members, and all the members of this association for their help and cooperation throughout this year, and I wish for all much pleasure and usefulness in the years ahead.

Cleon A. Nafe

PRIVATE PATIENT-CLINICIAN PLAN OF INDIANA UNIVERSITY SCHOOL OF MEDICINE

Dillon D. Geiger, M.D.,

BLOOMINGTON

IN announcing a program for the employment of full-time clinicians in the Indiana University School of Medicine, the administrative staff of the university, Dr. Cleon A. Nafe, president of the state medical association, Dr. Alfred Ellison, chairman of the Council, and Dr. Merrill Davis, president of the Medical Alumni Association, are in agreement and are anxious that the physicians in the state understand the program and some of the problems considered before its adoption by the Board of Trustees.

The Indiana plan is this: We employ outstanding clinicians and teachers at a specified salary rate on a twelve months' basis. These men are to confine their full activities to the campus of the Indiana Medical Center. Their primary obligations and duties are teaching and research. They may, however, attend a few private patients referred to them by physicians if the patient presents a condition within their specialty. The clinician will bill the patient directly for his service, collect his fee and then will receive the balance of his previously established salary from the university, since the university has underwritten a total salary for his full-time services. The clinician is not required to see any private patients in order to receive his maximum annual income; however, we did not feel that we could be interested in any plan which would remove our clinical departmental chairman from all contact with private patients. First of all, it would be difficult to find top-flight clinicians who would be willing to accept an arrangement denying them access to private consultation and private service. More important still, it would be difficult for the administration of the school to enforce any regulations prohibiting key men in the specialty fields from accepting at least an occasional emergency case. It would also be difficult, and certainly not in keeping with good public relations, to deny the skilled professional services of our department heads to any citizen of the state other than those regularly certified for free service. The medical school has a moral obligation to bring the best in medical practice, within proper limitations, of course, to all groups in our communities and state.

Months of study were given to evolving the best plan suitable to our school of medicine. The Indiana University School of Medicine is today one of the largest in the nation—a fact known to only too few of our physicians and citizens. This fall, the university announced the admittance of 150 new medical students. This compares with 75 new medical students at Ohio State University, 90 at the University of Iowa, 160 at the University of Illinois, and 150 at the University of Michigan. Other prominent medical schools, including the University of Chicago, Johns Hopkins, and Harvard, admitted fewer than 100 students.

In adopting this plan, it is recognized that we are changing our school of medicine from a proprietary type to one of university standing, and we were impressed early with the fact that by establishing this agreement we would be committing the school of medicine to a long-range plan for employment of full-time clinicians so that there can be no doubt about the quality of training our future physicians must receive at Indiana University. The highest standards of medical education must be maintained. We must continue to train good doctors to practice medicine; develop a complete graduate training program; and, in cooperation with the doctors of this state, continue to provide and improve our hospital services. And finally we must develop and sponsor a rich and full research program.

There is general agreement that full-time clinicians are needed to accomplish these aims. Full-time department staff members and chairmen are necessary in developing the teaching service and the research program of the major clinical departments of our school and hospitals. Full-time men of extraordinary accomplishment have long been needed in the teaching program and have been demanded for services to patients by physicians from all parts of our state. In adopting this plan, the administration is not unmindful of the long and loyal services given by the practitioners of various specialties to our school. We have been long dependent upon a volunteer faculty, and it is our feeling that by having a few key men in full-time clinical positions, we would continue to use to a better advantage our present part-time staff. The strengthening of major clinical departments by the employment of full-time chairmen will be a gradual process, by replacing the present part-time or volunteer heads when vacancies occur either by resignation or retirement or by decision of present chairmen to accept full-time appointment under the plan approved.

We have made careful surveys of most plans presently in operation in adopting the Indiana plan, and have investigated the methods employed by other schools of medicine in meeting the need for on-the-campus clinicians. Practically all schools provide offices and examining space for full-time clinicians. Most allow consultation privileges with private patients and provide for the acceptance of private patients in the university hospitals. The

similarity in plans apparently ends with the provisions just mentioned. The wide variation in the different plans is in relation to the base salary, the volume of private practice permitted, the method of billing private patients, and the checks and controls, if any, exercised in limiting private practice.

The plan we have adopted combines the best features of other plans and eliminates those that are objectionable to the medical fraternity. Furthermore, in our plan we felt that by placing a strict limitation on the private work done by a clinician, competition would not be offered to our practicing physicians. We aim to continue the harmonious relationship that exists between the medical school and physicians engaged in private practice. And in the interest of good medical care and teaching, we do not intend that our medical school and hospitals engage in the private practice of medicine.

It is our opinion that the employment of full-time clinicians to head the major departments will enable the medical school to maintain the highest standards of medical education, improve and provide hospital services, and develop a graduate school and research center. With the capable and sincere administration of President Wells and Dean Van Nuys and with the sympathetic understanding and cooperation of the physicians and their leaders, the school of medicine will continue to fulfill its obligations and duties to the medical profession and to the people of the state of Indiana.

DIABETES DETECTION

FRANKLIN B. PECK, M.D.*

INDIANAPOLIS

THE existence of a million undiscovered diabetic patients in the United States and Canada has been demonstrated through a series of surveys, the most recent one conducted by the United States Public Health Service. The results of these studies now provide a springboard for organized medicine and a golden opportunity for physicians to seize the initiative *on their own* in this significant phase of public health.

The American Diabetes Association has planned a campaign to promote the early discovery and prompt treatment of the million undiscovered cases of diabetes. This campaign is unique in professional service, for according to plan the physician himself will be at the helm. Therefore, the plan cannot be prosecuted, or even started, without the endorsement and support of the entire medical profession through its governing bodies, national, state, county, and local medical societies. At the October session the Indiana State Medical Association through its House of Delegates moved to support this program and appoint a Committee on Diabetes to study the needs in Indiana and formulate plans.

The American Diabetes Association will carry on an intensive educational campaign directed first toward doctors' postgraduate courses. It will be directed toward the layman by radio, newspapers and other publicity channels, in addition to the *A.D.A. Forecast*, the association's bimonthly magazine which brings to the diabetic patient homespun articles on the disease by eminent authorities in the field. At the same time the association will place in the hands of physicians over the country an authentic "Handbook of Therapy." Containing the most up-to-date information available, the handbook will assist the physician in treating diabetic patients.

The week of December 6-12, immediately following the interim meeting of the American Medical Association, will be proclaimed as "Diabetes Week." This will be the formal beginning, the kickoff, of the Association's Diabetes Detection Drive, which obviously must be a year-round effort. From this start, the program will continue on a long-term basis.

Owing to the nature of the illness, the detection of diabetes falls naturally into the domain of the general practitioner. It is he who must accept this responsibility as his own, and it is fortunate that the diagnosis can be suspected by such a simple procedure as the test for urinary sugar rather than by more expensive and less readily available techniques, such as x-ray. After the positive urine tests have been found, more accurate laboratory findings become essential.

If everyone were given a urinalysis during "Diabetes Week," or routinely on every birthday, and if a postprandial blood sugar test were made for each positive urine test found, diabetes would be detected early in its course and all the major objectives of the drive would be accomplished.

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* President, Indianapolis Clinical Diabetes Society, and member of the Council of the American Diabetes Association.

Medical Panorama by the Associate Editor

Military Medical Service

Much has been written concerning the shortage of medical officers in the Army, and the urgent need of additional doctors to care for the even larger Army which will be created by the present peacetime draft. When the Selective Service Act of 1948 was passed, the age limit for all inductees was specified as from 18 through 25. It is obvious that this age limit will procure very few physicians, and that some additional procedure will be necessary.

At one stage of debate the Selective Service Act contained provisions for the drafting of doctors up to the age of 45. This method of procurement was eliminated by congress prior to passage of the Bill, on the representation of the American Medical Association that the required medical assistance could be obtained on a volunteer basis.

To date the response of American physicians has not been sufficient to indicate that this method will supply the 4,000 more doctors who will be needed by June 1949.

The Surgeon General of the Army is required by the Selective Service Act to certify that adequate medical service is available for each increment of inductees. This is a wise provision of the law, and it is reasonable to assume that congress will be willing to draft the doctors necessary for its fulfillment, if they are not available by other means.

The Army has no legal hold on the physicians who were educated during the war at government expense, even in the case of those who have not been called upon for military service. This group, however, does have considerable moral obligation, and would naturally be looked to for voluntary service, or in the event of a draft. As has been said before, this is not an unusual request. They are not being asked to do anything that patriotic citizens object to. They are not asked to do anything that many thousands of older doctors have not done during wartime.

The problem would not be completely solved by the immediate induction of all such physicians. Their group is not only deficient as to numbers, but also would not provide the required specialists. The medical profession is therefore confronted with a complex problem.

It is traditional that the military services of the United States have always been provided with the highest type of medical service. It is to the credit of civilian doctors that this has been accomplished in every instance in which the task has been too large for the regular medical services. The fact that the present emergency has arisen in peacetime tends to make the situation a little more difficult to face, and makes separation from private practice more irksome, but does not diminish the importance of the obligation.

The opportunities for postgraduate training are so excellent in the United States Army today, that it should be unnecessary to mention any other reasons for peacetime service in the Medical Corps. Since most of the medical work is now done in hospitals which treat not only the military personnel but also their dependents, the patient load of the Army today includes women, children and oldsters. All hospital services are organized on a teaching basis, with visiting consultants and a training program which includes a wealth of clinical material and numerous conferences. Officers are now permitted to select a specialty, and are assigned accordingly, if at all possible. The existence of such a program is of particular interest to a volunteer officer.

News Notes

COMING MEETINGS

Indiana State Medical Association, Indianapolis, September 26, 27, 28 and 29, 1949.

American Medical Association, Annual Session, Atlantic City, June 6-10, 1949.

American Academy of Dermatology and Syphilology, Chicago, December 5-9, 1948.

Association for Research in Nervous and Mental Diseases, New York City, December 10 and 11, 1948.

Radiological Society of North America, San Francisco, December 5-10, 1948.

Southern Psychiatric Association, Dallas, Texas, December 6-7, 1948.

Southern Surgical Association, White Sulphur Springs, West Virginia, December 7-9, 1948.

The Fifth Annual Clinical Conference of the Chicago Medical Society will be held in Chicago at the Palmer House, March 1, 2, 3, and 4, 1949. The scientific program promises to be most outstanding with well-known speakers from all sections of the country discussing subjects which will be of interest to all physicians. Many scientific exhibits are being planned and the technical exhibits will be well displayed. Sufficient time will be given for viewing both of these exhibits.

One of the interesting features of the Conference will be the luncheon round tables when questions will be answered by the speakers.

Physicians of other states and cities are cordially invited to attend this important medical meeting. Reservations should be made direct with the Palmer House.

Dr. W. L. Portteus, Franklin, secretary of the Indiana Doctors' Plan, was elected trustee-at-large of the national Blue Shield Commission, representing the physician-sponsored plans for prepaid health care throughout the United States and territorial possessions. His election occurred at the national conference of Blue Shield executives at French Lick in October.

A former resident of Goshen, **Dr. Frederick H. Simmons**, has opened an office for the practice of otolaryngology at 506 Glass Block, in Marion. He is a 1940 graduate of the Indiana University School of Medicine, and spent his internship at St. Vincent's Hospital in Indianapolis. He served for four and one-half years as flight surgeon in England and the North African areas with the U. S. Army in World War II. After his release from the service, he took three years of training in ENT at the Indiana University Medical Center.

Dr. Walter F. Kelly, of Indianapolis, who has practiced in the Irvington district for many years, may now be addressed as "Senator." He was elected to the Indiana senate last month on the Democratic ticket. Doctor Kelly is the first physician elected to the Indiana General Assembly since the late Dr. Renos Richards of Patricksburg.

Dr. David Hadley has announced the opening of an office at 809 Hume Mansur Building, in Indianapolis, for the practice of orthopedics. Doctor Hadley has completed three years of postgraduate work, including one year at Riley Hospital and two years at General Hospital, in Indianapolis. A 1940 graduate of the Indiana University School of Medicine, he is a veteran of World War II, with three years and nine months' service. He spent nine months overseas as the 87th Division's artillery surgeon. He was separated with the rank of major.

Under the auspices of **The Alembert Winthrop Brayton Skin and Cancer Foundation**, the Department of Dermato-Syphilology at Indianapolis General Hospital and Health Center has arranged for monthly guest-conducted clinicopathological conferences. The next one will be held on December 10, when the guest speakers will be J. Lamar Callaway, M.D., professor of Dermato-Syphilology, of Duke University, Durham, North Carolina; Sture Johnson, M.D., Professor of Dermato-Syphilology, University of Wisconsin, Madison, Wisconsin; and George M. Lewis, M.D., New York Hospital and Cornell University Medical School, New York City. From 8:30 to 9:30 a.m., there will be a viewing of clinical outpatient cases, at General Hospital. From 9:30 to 12:30, there will be a discussion of cases, in the Lilly Auditorium, at General Hospital. Luncheon will be held from 12:30 to 1:30 in the staff dining room at General Hospital, and from 2:00 to 4:00 p.m., there will be a walk through department facilities. Superficial and deep mycotic infections are to be emphasized at this conference.

Dr. John D. Van Nuys, dean of Indiana University School of Medicine, was awarded honorary membership in the Indiana Academy of General Practice at its meeting held in Indianapolis during the annual convention of the Indiana State Medical Association. The award, the first to be given to an Indiana physician, was given "in recognition of his work at our medical school in fostering teaching by and for the general practitioners and establishing internships and residencies in general practice at the university hospitals."

Dr. E. Rogers Smith, of Indianapolis, clinical professor of nervous and mental diseases at the Indiana University School of Medicine, was elected president of the Central Neuropsychiatric Association at its convention in Kansas City, October 30. His term of office is from October 1948 until October 1949. He served as vice-president of this association from 1941 until 1946. He succeeds Dr. William Menninger, of Topeka, Kansas.



E. Rogers Smith, M.D.

Doctor Smith is also a senior consultant in the department of neuropsychiatry for the state of Indiana for the Veterans Administration in Washington.

For the best specific public relations project conducted by a Blue Cross-Blue Shield Plan having from 200,000 to 500,000 members, **James A. Waggener**, public relations director of the Indiana plan, was awarded a plaque at the first joint internationl conference of hospital and physician-sponsored health care plans at French Lick in October.

The prize-winning exhibit prepared by Mr. Waggener described the community-wide enrollment carried on in Marion, Indiana, earlier this year under the sponsorship of the local hospital, medical association, and civic clubs.

Membership in the Indiana Blue Cross Plan for Hospital Care exceeds 350,000. More than 32,000,000 people in all 48 states, 7 Canadian provinces and Puerto Rico, are enrolled in Blue Cross plans. The newer Blue Shield Plans for Surgical and Obstetrical Care have total membership of over 8,000,000, 200,300 of which are Hoosiers. A former Hoosier and graduate of Indiana University, Dr. Paul R. Hawley is chief executive officer of both plans.

A 1945 graduate of the Indiana University School of Medicine, **Dr. Harold Lehman**, of Portland, has opened an office for the general practice of medicine and surgery in Berne. Doctor Lehman entered the Army in 1946 and served for one and one-half years at the Great Falls, Montana, air base.

Discharged from the Army recently, **Dr. Joseph V. Schetgen**, formerly of New Castle, has opened an office for the practice of medicine in Geneva. He graduated from the Indiana University School of Medicine in 1945, and spent two years and eight months in the Army, serving most of that time in the Philippines.

Drs. Rolla D. Burghard and **Harry M. Sanders** have opened offices at 3760 Sherman Drive, in Indianapolis, for the general practice of medicine. Doctor Burghard is a 1943 graduate of Indiana University School of Medicine, and served for four years in the United States Navy, having participated in the atomic bomb tests at Bikini. Following his release from service, he spent a year at the Methodist Hospital in Indianapolis. Doctor Sanders is a 1947 graduate of the Indiana University School of Medicine. He is a veteran of the United States Army, and has just completed a year at the Methodist Hospital in Indianapolis. He is commanding officer of the medical detachment of the 38th Division Artillery of the Indiana National Guard.

Dr. Michael W. Manzie has opened an office for the general practice of medicine in Lyons. A graduate of the Indiana University School of Medicine in 1945, he served his internship at the Indianapolis General Hospital, and later served as resident in internal medicine there. He completed postgraduate study in EENT at the New York Polyclinic Hospital in 1947. Following this, he was connected with the Indianapolis Industrial Clinic, in traumatic surgery and industrial medicine.

Announcement was made recently of the appointment of **Dr. John H. Waterman**, of Houston, Texas, as director of the Child Guidance Clinic recently established at the Indiana University Medical Center. As a member of the teaching staff of the Indiana University School of Medicine, Doctor Waterman has the rank of associate professor of psychiatry, and is in charge of the supervision of training in the field of child psychology and psychiatry. For the past five years he has been in charge of the Houston Child Guidance Clinic. Prior to that, he spent three years as director of the Tri-County Child Guidance Clinic at Harrisburg, Pennsylvania. His experience also includes two years as director of the child psychiatry clinic at Hastings State Hospital, Ingleside, Nebraska, a year's fellowship at the Philadelphia Child Guidance Clinic, and residencies and postgraduate work at Johns Hopkins Hospital.

Dr. George M. Haymond, of North Manchester, recently announced the opening of an office for the general practice of medicine in Warsaw. Discharged from the Army last June, Doctor Haymond spent two years with the United States Army, having served for a year and a half at the Percy Jones General Hospital, in Battle Creek, Michigan. He is a graduate of the Indiana University School of Medicine.

Dr. L. W. Freeman, surgical research director at the Indiana University School of Medicine, has been appointed to membership on the Medical Advisory Committee of the National Paraplegia Foundation. The committee met in Chicago in November to consider proposals for establishment of treatment centers for paraplegia victims in civilian life, similar to those maintained for members of the armed services.

Election of officers at the meeting of **The Indiana Health Officers Association** in Indianapolis during the state convention resulted in the following physicians being elected: President, Dr. J. W. Pahmeier, Sandborn; Vice-president, Dr. Claude Dollens, Oolitic; Secretary, Dr. Morris Balla, South Bend; and Treasurer, Dr. William Weis, Crown Point.

Dr. Robert A. Morris has moved to Anderson from Dallas, Texas, and has opened an office for the practice of pediatrics there. Immediately after graduating from the Indiana University School of Medicine, in 1943, Doctor Morris entered the Army, where he spent two years in the Medical Corps. Following his release from service, he took two years of postgraduate work in pediatrics at the Children's Medical Center in Dallas.

Dr. Charles A. Zeller has resigned as superintendent of the Logansport State Hospital to accept the directorship of the Governor Bacon Health Center, in Delaware City, Delaware. He assumed his new duties on November fifteenth.

The Pike County Medical Society has established a program of immunization of all children in the county from the age of nine months up to and including the twelfth grade in school, for tetanus, diphtheria, whooping-cough, and smallpox. The program began in October, 1948, and will be completed in January, 1949. A charge of fifty cents for each injection, or a total of $2.00 for the series, is made; however, no child is deprived of immunization because of lack of funds. The funds from this project are used to finance a Pike County girl in nurses training.

Following is a list of Indiana physicians who were received into Fellowship in the American College of Surgeons at the convocation during the Clinical Congress in Los Angeles on October 22: Fay Frank Boys, East Chicago; Ransom R. Buchholz, Evansville; Raymond R. Calvert, LaFayette; Melvin S. Durkee, Evansville; Wayne R. Glock, Fort Wayne; Donald Grillo, South Bend; Thomas C. Haller, Crawfordsville; John S. Hash, Noblesville; Morris H. C. Johnson, Vincennes; Carl D. Martz, Charles O. McCormick, Jr., and Ralph J. McQuiston, all of Indianapolis; Antone C. Remich, Hammond; and Richard C. Stauffer, Fort Wayne.

Dr. Charles D. Benedict, a graduate of the Indiana University School of Medicine, has become associated with **Dr. Harry G. Erwin,** of LaGrange, in the practice of medicine. Doctor Benedict has just completed a residency at the Percy Jones General Hospital, in Battle Creek, Michigan.

CORRECTION

In the October issue of THE JOURNAL an announcement was carried to the effect that **Dr. Eugene F. Kratzer** had retired and moved to Kokomo, such announcement being based on a newspaper clipping. This is an error, as Doctor Kratzer has moved his office and residence to 320 East Walnut Street, in Kokomo, and is still engaged in active practice. THE JOURNAL regrets any embarrassment this misinformation may have caused Doctor Kratzer.

Nursing for the Future

The Indiana State League of Nursing Education and the Division of Nursing Education, Indiana University, in cooperation with the Indiana State Board of Examination and Registration of Nurses, the Indiana State Board of Health, and the Indiana State Nurses' Association, announce a work-shop on "What Should Indiana Plan in Relation to Recommendations on Nursing for the Future: Commonly Called the Brown Report on the National Nursing School Study?" It will be held on the Indiana campus at Bloomington, on January 5, 6, and 7, 1949.

On Wednesday morning, January 5, Dr. Augustus P. Hauss, president of the Indiana State Medical Association, and Dr. E. H. Clauser, member of the association's Committee on Medical Education and Hospitals, will appear on the program.

This work-shop is planned especially for such groups as the following in the State of Indiana: interested physicians; hospital administrators; university and college presidents; directors and faculty members of schools of nursing, members of nursing school committees; directors of public health nursing agencies; executive officers of council of social agencies; potential patients or consumers of nursing; and presidents and board members of such state organizations and agencies as the Indiana State Medical Association, the Indiana Hospital Association, the Indiana Public Health Association, the State Nurses' Association, the State Department of Public Instruction and other interested groups.

Information and application forms may be secured by writing Mrs. Eugenia K. Spalding, Director, Division of Nursing Education, School of Education, Indiana University, Bloomington, Indiana, who will serve as director of the work-shop.

Deaths

Earl K. Holt, M.D., died at his home in Harding, Massachusetts, on November 10, at the age of fifty-nine. Doctor Holt was a graduate of Indiana University School of Medicine, in 1914, and had practiced in Indiana before going to Massachusetts.

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Gilbert A. Hoppes, M.D., of Anderson, died on October 22. He was fifty-eight years of age. He graduated from the Indiana University School of Medicine in 1912, and had practiced in Anderson for twelve years. Prior to that, he had practiced in Mechanicsburg for six years.

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William Carle Landis, M.D., of Claypool, died on October 19, at the age of sixty-seven. He had been ill for the past three years. He graduated from the Bennett College of Eclectic Medicine and Surgery, in Chicago, in 1907, and had specialized in pediatrics. He was a veteran of World War I.

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Charles D. Pettigrew, M.D., of Muncie, died on October 27, at the age of seventy-one. He was a graduate of the Medical College of Indiana, in Indianapolis, in 1898, and had practiced in Delaware County for thirty-two years.

* * *

Edison Kerl Westhafer, M.D., of New Castle, died on November 9, at the age of seventy. He had been ill for several months. He graduated from the Central College of Physicians and Surgeons, in Indianapolis, in 1905, and began the practice of medicine in Westport. After two years, he moved to New Castle and had practiced there until 1946, when he retired because of ill health. He was a veteran of World War I, and was a member of the Henry County Medical Society, the Indiana State Medical Association, and the American Medical Association.

* * *

Lewis DeWitt Reed, M.D., a practicing physician at Hope for fifty-three years, died on October 16, following an illness of several weeks. He was eighty-five years of age. He was a graduate of the Central College of Physicians and Surgeons, in Indianapolis, in 1890, and had practiced at Fairfield for seven years before establishing a practice in Hope. He was an honorary member of the Bartholomew-Brown County Medical Society and the Indiana State Medical Association, and was a Fellow of the American Medical Association.

Harry Aldrich, M.D., of Fort Wayne, died on October 31, at the age of sixty-three, after an illness of seven months. He had practiced in Fort Wayne for twenty years, and prior to that in Fairmount for thirteen years. Doctor Aldrich graduated from the Indiana University School of Medicine in 1914. He was a veteran of World War I, and was a member of the Allen County Medical Society and the Indiana State Medical Association, and was a Fellow of the American Medical Association.

* * *

Ralph Nordock Arnold, M.D., of Greenfield, died suddenly on October 19. He was fifty-five years of age. He was a veteran of World War I, and a graduate of The Hahnemann Medical College and Hospital, in Chicago, in 1917. He was serving as health commissioner of Hancock County at the time of his death. He was a member of the Hancock County Medical Society, the Indiana State Medical Association, and the American Medical Association.

* * *

Mardiros H. Derian, M.D., of Gary, died on November 1, at the age of sixty-one, after a prolonged illness. He graduated from the Loyola University School of Medicine, in 1918, and had specialized in Radiology. He was a member of the Lake County Medical Society, the Indiana State Medical Association, and the American Medical Association.

* * *

H. Brooks Smith, M.D., of Bluffton, died on October 18, following an illness of ten months. He was forty years of age. He was a graduate of the Indiana University School of Medicine in 1932, and had been associated with the Caylor-Nickel Clinic in Bluffton since 1935, where he specialized in otolaryngology. He was a member of the Wells County Medical Society, the Indiana State Medical Association, and the American Medical Association.

* * *

Daniel E. Taylor, M.D., a practicing physician in Velpen for forty-five years, died on October 25, at the age of seventy-nine. He graduated from the Hospital College of Medicine, in Louisville, in 1903, and was an honorary member of the Pike County Medical Society and the Indiana State Medical Association, and was a member of the American Medical Association.

Society Reports

INDIANA STATE MEDICAL ASSOCIATION

THE COUNCIL

(Indianapolis Session, 1948)

First Meeting

The first meeting of the Council was held in the Kneipe Room of the Murat Temple, at 12:30 p.m., Tuesday, October 26, 1948, with Dr. Alfred Ellison, the chairman, presiding.

Roll call showed the following members present:

Councilors:

First District——Herman T. Combs, Evansville
Second District——James H. Crowder, Sullivan
Third District——William H. Garner, New Albany
Fourth District——George A. May, Columbus
Fifth District ——A. M. Mitchell, Terre Haute
Sixth District——W. U. Kennedy, New Castle
Seventh District——C. J. Clark, Indianapolis
Eighth District——E. H. Clauser, Muncie
Ninth District——Wemple Dodds, Crawfordsville
Tenth District——W. H. Howard, Hammond
Eleventh District——C. S. Black, Warren
Twelfth District—Paul A. Garber, South Whitley
Thirteenth District——Alfred Ellison, South Bend

Officers:

Cleon A. Nafe, Indianapolis, president
Augustus P. Hauss, New Albany, president-elect
A. F. Weyerbacher, Indianapolis, treasurer
Frank B. Ramsey, Indianapolis, associate editor of THE JOURNAL

Members of Executive Committee:

C. H. McCaskey, Indianapolis, chairman
W. L. Portteus, Franklin
Albert Stump, Indianapolis, attorney
Ray E. Smith, executive secretary

Alternate Delegates to the A.M.A.:

Karl R. Ruddell, Indianapolis
E. S. Jones, Hammond

General Arrangements Committee:

Bert E. Ellis, Indianapolis, chairman

Legislative Committee:

Norman M. Beatty, Indianapolis } co-chairmen
J. William Wright, Indianapolis }

Committee on Centennial Celebration and History:

Charles N. Combs, Terre Haute, chairman

State Board of Health:

L. E. Burney, Indianapolis, director

On the motion of Drs. Mitchell and Garber, the minutes of the July 11, 1948, meeting of the Council, held in Indianapolis, were approved as printed in the September, 1948, JOURNAL.

Unfinished Business

1. *Convention arrangements.* Dr. Ellis reported that his committee had completed arrangements, within the budget allowed by the Council, and that everything pointed toward a good convention.

2. *Centennial celebration.* Dr. Charles N. Combs, chairman of the Committee on Centennial Celebration and History, said that his committee, acting on Dr. Hauss' suggestion, would defer its report on centennial celebration arrangements until the January meeting of the Council, the immediate problem being the publication and sale of the memorial book covering the history of medicine in Indiana for the past one hundred years. Dr. Combs discussed the difficulties he had encountered in securing acceptable printing bids and reported that the signing of a contract for publication of the book had been withheld pending decision of the Council.

On motion of Drs. Clark and Mitchell, Dr. Combs and the members of his committee, and the executive secretary, were given authority to proceed with the printing of this book, and to use their own judgment as to printing contract and other necessary arrangements.

3. *Committee on Evaluation of Hospital Licensing.* Dr. Dodds, chairman, presented the following report, which was accepted by the Council:

This committee was created in response to the request of Dr. L. E. Burney, State Health Commissioner of Indiana. At the meeting of the Council at the French Lick Session in 1947, Dr. Burney stated that the Hospital Regulating and Licensing Council, which administers the law, had asked for evaluation of its methods and procedures and desired that the Indiana Hospital Association and the Indiana State Medical Association appoint committees either jointly or separately to make this evaluation.

A joint meeting of the committee with a similar committee of the Indiana Hospital Association was held at the Indiana State Board of Health on February 10. Dr. Burney and members of his staff outlined the origin, enactment and general provisions of the law. The details of administration were discussed and a report of a survey of hospitals for compliance with the General Regulation for Hospitals was given.

Under the law, licensing and regulation of hospitals is accomplished through a council composed of eight members. One member of this council must be a member of the medical profession having an unlimited license to practice medicine. The membership of the council is specifically designated in the law, and is in the opinion of the committee adequately representative of the groups and agencies which would be concerned in the administration of the law.

The Council has set up general regulations for licensing hospitals. The regulations concerning the administration, the physical plant and environmental sanitation are adequate, and would serve to insure that a licensed hospital is well-managed and maintained.

The regulations concerning the medical staff are sufficiently flexible to be applied to hospitals of varying size. The organization of the medical staff and staff rules as set out in the regulations are those contained in "Essentials of a Registered Hospital," prepared by the Council on Medical Education and Hospitals of the American Medical Association.

The regulations concerning radiologic and pathologic laboratory services are excellent and should not work a hardship on any hospital.

In the opinion of the committee, the Indiana State

Board of Health and the Hospital Regulating and Licensing Council are to be commended for the excellent administration of the law.

WEMPLE DODDS, M.D., *Chairman*
C. S. BLACK, M.D.
W. H. HOWARD, M.D.
E. H. CLAUSER, M.D.
C. J. CLARK, M.D.

4. *Report of Special Committee Appointed to Investigate Matter of Improper Medical Testimony in Industrial Cases.* The report of this committee, presented by Dr. Howard, chairman, was adopted by the Council and referred to the House of Delegates. (See House of Delegates' minutes, page 1292).

Dr. May moved "that the Council as a whole act as the referee body to sit in judgment upon those who are giving false testimony." This motion was duly seconded and passed.

5. *Committee on Medical and Nursing School Scholarships.* Dr. Clark, chairman, reported that the state medical association now is sponsoring eleven student nurses, four through the Krannert fund, one through the Meyer fund, and six directly by the association, and six medical students through the state association scholarship fund. He said, "If we do anything, I suggest that we extend our activities to benefit more students, but I am not requesting that we do this."

6. *Mutual Medical Insurance, Inc.* Dr. Kennedy, president, reported that continued satisfactory progress is being made by Mutual Medical Insurance, Inc.

7. *Alternate councilors.* Dr. Clark moved "that the Council recommend that the By-Laws be changed whereby each councilor district be requested to elect an alternate councilor who will act as a stand-in for the regular councilor." Motion seconded by Dr. Black, and carried.

8. *Automobile insurance company proposal.* The following report, presented by Dr. Howard, chairman of the special committee appointed to study this matter, was accepted by the Council:

REASONS WHY ASSOCIATION SHOULD NOT ORGANIZE AN AUTO INSURANCE COMPANY

1. If a company's business is restricted to physicians and dentists there would not be a large enough income to operate on the most economical basis.

2. No actuarial data has been produced which would indicate that the doctors would be a good risk.

3. Chances are that doctors would not be a good risk, not because they are poor drivers, but because they are exposed to traffic hazards to an extent greater than the layman automobile owners. Being out on the road a great deal makes it natural that doctors would be likely to have more automobile accidents than would farmers, laborers and businessmen, who transact practically their whole business at one place as would a banker or a druggist, for instance.

4. Without more knowledge on this subject of insurance for doctors and dentists only, there would be the danger that we would have a much higher loss ratio than the ordinary company would. If that fact were established statistically, then the medical profession probably would find that it was injured through the data that this proposed company would accumulate. The rates then for insurance would go higher for doctors than they are now when the doctors are given insurance on the same terms as anyone else. Taxicabs are rated up, not because they do not have good drivers, but because they are continuously exposed to the hazards of the traffic.

For the above reasons it is recommended that the medical profession do not undertake to form an auto insurance company for physicians and dentists only.

New Business

1. *Vital statistics law.* Dr. L. E. Burney, state health commissioner, spoke of the efforts being made to change the vital statistics law which would make birth and death records available to the public. He said that the State Board of Health believes that the present law is a proper one and that birth and death information should be available only to those having a direct personal interest in the matter.

Dr. Mitchell made the motion that "the Council stand back of the State Board of Health in its stand-pat attitude on this question and that publicity be given to this attitude of the Council." This motion was seconded by Dr. Garber, and passed.

2. *Legislative matters.* Dr. Beatty and Dr. Wright, co-chairmen of the Legislative Committee, spoke of the problems facing their committee at this time.

3. *Veterans' affairs.* Dr. Charles F. Thompson, chairman of the Committee on Veterans Affairs and rehabilitation, read to the Council the proposals made by the Committee on Emergency Medical Service (the duties of which were delegated to the Veterans Committee by the Council at its July 11, 1948, meeting) to component county medical societies of the state association in anticipation of a national emergency. Dr. Thompson said that it was the recommendation of his committee that these proposals be transmitted to the county medical societies. Indiana's quota of the required 4,000 medical officers by July, 1949 would be approximately ninety.

Dr. Clark's motion for acceptance of this report was duly seconded and passed. Dr. Kennedy then moved that Dr. Thompson be asked to present this report to the House of Delegates. Motion seconded by Dr. Clark, and carried. (See House of Delegates' minutes, page 1291).

4. *Conference with I. U. officials.* The chairman called upon Dr. Nafe, who gave the following report on a conference with some of the officials of Indiana University concerning the Indiana University School of Medicine: (See House of Delegates' minutes, page 1290).

Dr. Herman M. Baker, chairman of the committee on Medical Education and Hospitals, also discussed this matter, and on motion of Drs. Mitchell and Clark, the report was adopted. Dr. Baker was instructed to present this as a supplementary report of his committee to the House of Delegates.

5. *Appellate Court decision in Andrews case.* Mr. Stump, attorney, reported on the Indiana Appellate Court decision in the Dr. D. Lee Andrews case.

6. *Associated Medical Care Plans conference.* Dr. Portteus, reporting on the national conference of Blue Shield executives, held at French Lick October 23 to 28, 1948, read the following recommendations made by the A. M. C. P. Commission:

1. It is recommended to the Conference of Plans that the proposals for a Blue Cross-Blue Shield Association and Blue Cross-Blue Shield Health Service, Inc., be thoroughly discussed by the member Plans but that final action not be taken at this conference.

2. It is recommended that after discussion of the Blue Cross-Blue Shield Association and Blue Cross-Blue Shield Health Service, Inc., by the Conference of Plans that the proposals be referred to the component units of Associated Medical Care Plans for discussion and an expression of their opinion to the Commission; and it is further recommended that printed copies of the proposals be distributed in quantity to the Plans for their further study and conference with their sponsoring medical societies.

3. It is recommended to the Conference of Plans that the proposals for a Blue Cross-Blue Shield Association and Blue Cross-Blue Shield Health Service, Inc., be referred to the House of Delegates of the American Medical Association at the St. Louis Interim Session or any subsequent session; that Associated Medical Care Plans request that the House of Delegates grant a hearing on the subject of these proposals; and that to implement this resolution the president of Associated Medical Care Plans be authorized to appoint a special committee of such size and personnel as he may determine to develop and carry into effect ways and means for the adequate presentation to the AMA House of Delegates of all factors bearing upon the proposals.

Dr. Portteus said he felt that a meeting should be held with the Board of Directors of Mutual Medical Insurance, the Council and the House of Delegates of the state medical association, the delegates to the American Medical Association, plus any individuals who might be interested, to discuss thoroughly this matter and get an expression of opinion. Although this may not be presented at the interim session of the A.M.A. because A.M.C.P. is not sure it can have data to present on both sides of the question, the Executive Committee of the state association feels that the delegates to the A.M.A. should be informed on both sides of the question. Dr. Portteus said the general opinion at French Lick was that the Plans do not want to do anything that is contrary to the wishes of the medical profession.

Following discussion by Drs. Beatty, Clark and Nafe, on motion of Drs. Mitchell and May, it was agreed that the president should call a meeting of the Council and House of Delegates for sometime about the middle of November. Dr. Nafe later announced that this meeting would be held in Indianapolis on November 21.

7. *Nominations for General Practitioner of the Year award.* The special committee, composed of Drs. Clauser, Combs and May, appointed to peruse the material submitted, reported that it had been assigned a difficult task, as each of the fifteen men proposed for this award was qualified and deserving. On recommendation of the committee and on motion of Drs. Mitchell and Garber, the following three names were to be presented to the House of Delegates:

C. C. DuBois, Warsaw
G. H. Kamman, Seymour
D. D. Oak, LaCrosse

8. *Election of editor and associate editor of* THE JOURNAL *for 1949.* On motion of Drs. Clark and Mitchell, Dr. E. M. Shanklin, Hammond, was elected editor emeritus for life, and Dr. Frank B. Ramsey, Indianapolis, was elected editor of THE JOURNAL for 1949. The chairman of the Council was instructed to send a letter of appreciation to Dr. Shanklin for his many years of faithful service as editor of THE JOURNAL.

On motion of Drs. Mitchell and Clark, the name of Dr. A. W. Cavins, Terre Haute, was withdrawn as a nominee for membership on the Editorial Board and Dr. Cavins was elected associate editor of THE JOURNAL for 1949.

9. *Election of Editorial Board members.* Dr. Raymond F. Carmody, Gary, and Dr. E. L. Cartwright, Fort Wayne, were elected members of the Editorial Board, to serve for three years and to succeed Dr. F. R. N. Carter, South Bend, and Dr. E. L. Bulson, Fort Wayne.

10. *Executive Committee matters.* Dr. McCaskey, chairman, presented the following matters:

a. The Executive Committee's choice of man to fill the position of field secretary.

b. Use of "M.D." license plates. It is the opinion of the Executive Committee that the use of these plates is poor public relations for the profession. (Dr. Beatty announced that 1949 plates already have been made, but use of "M.D." on the 1950 plates will be abandoned.)

On motion of Drs. Black and Garber, Dr. McCaskey's report was accepted.

11. *Indigent medical care.* It was taken by consent that the letter received by Dr. Black from Dr. Donald J. Caseley, medical director, Indiana University Medical Center, should be referred to Drs. Beatty and Wright for their attention, without reading.

12. *Request for additional appropriation from the Committee on School Health and Physical Education.* Dr. Portteus, chairman of this committee, explained that the conference of school health officials and physicians, held on September 29, in Indianapolis, and attended by 199 persons, had depleted the appropriation made to his committee by the Budget Committee. Only $7.19 remains out of $150.00 appropriated. He requested additional funds in order to comply with the wishes of those attending the conference that printed resumés of the papers presented at the conference be sent

to each of them. "We feel this is a good public relations gesture," Dr. Portteus said. "If you care to continue that bit of public relations, we will have to have a little over $150.00."

On motion of Drs. Garber and Black, $50.00 was appropriated to take care of this committee's expenses for the remainder of 1948.

13. *Request for funds for postgraduate courses.* The chairman read the following letter:

"The Allen County Medical Society wishes you, the members of the council of the Indiana State Medical Association, to furnish financial aid to help pay the expenses of postgraduate courses which are now in progress. I have been authorized by the Allen County Medical Society to make this request.

"Respectfully,
M. B. CATLETT, Delegate
from Allen County."

On motion of Drs. Mitchell and Black, this request was referred to the Committee on Medical Education and Hospitals, with the notation that this committee report on this matter at the next meeting of the Council.

Date for Midwinter Council Meeting

The Council set Sunday, January 16, 1949, as the date for the midwinter meeting.

There being no further business, the Council adjourned at 4:00 p.m., to meet again on Thursday, October 28, following adjournment of the House of Delegates.

THE COUNCIL

(Indianapolis Session, 1948)

Second Meeting

The second meeting of the Council convened immediately following adjournment of the House of Delegates, Thursday afternoon, October 28, 1948, in the dining room, Murat Temple, with Dr. Alfred Ellison, the chairman, presiding.

Roll call showed the following members present:

Councilors:

First District—Herman T. Combs, Evansville
Second District—Not represented
Third District—William H. Garner, New Albany
Fourth District—George A. May, Madison
Fifth District—Not represented
Sixth District—Not represented
Seventh District—C. J. Clark, Indianapolis
Eighth District—E. H. Clauser, Muncie
Ninth District—Wemple Dodds, Crawfordsville
Tenth District—William H. Howard, Hammond
Eleventh District—C. S. Black, Warren
Twelfth District—Paul A. Garber, South Whitley
Thirteenth District—Alfred Ellison, South Bend

Officers:

Cleon A. Nafe, Indianapolis, president
A. P. Hauss, New Albany, president-elect
A. F. Weyerbacher, Indianapolis, treasurer

Executive Committee:

C. H. McCaskey, Indianapolis, chairman
Ray E. Smith, executive secretary

Dates for 1950 Annual Session

On motion of Drs. May and Garber, the Council approved the preliminary arrangements made by the executive secretary, and Monday, Tuesday and Wednesday, October 25, 26 and 27, 1950, are to be reserved at the French Lick Springs Hotel for the 1950 annual session.

Convention Publicity

The chairman called attention to the obligation that had been placed on the Council and the Executive Committee by the House of Delegates to edit and censor information and news based upon utterances of association officers, and asked if the Council wished to reserve that right for the Council. Dr. Howard made the motion that this censorship and editing be the duty of the Executive Committee. Dr. Clark suggested that Dr. Howard's motion should include the fact that such speeches should be presented to the Executive Committee sufficiently in advance of the time they are to be presented, to allow the committee time for proper censoring and editing. Dr. Howard's motion, including the above amendment, was seconded by Dr. Clark, and passed.

The chairman suggested that one of the routine duties of the headquarters office should be to send the officers, or those speaking on behalf of the association, a reminder calling attention to this action of the Council and stressing the gravity of this matter.

Employment of Field Secretary

Dr. Nafe and Dr. McCaskey told of the interviews that had been held with applicants for the position of field secretary and spoke in particular of the man who seems to have all of the required qualifications. On motion of Drs. Clark and Garber, the Council authorized the Executive Committee to employ the man it has selected, with the stipulation that he be presented to the Council for its concurrence in the Executive Committee's decision before a final agreement is reached.

No further business appearing, the Council adjourned.

HOUSE OF DELEGATES

(Indianapolis Session, 1948)

First Meeting

The House of Delegates convened for its first meeting during the 1948 annual session in the Murat Theater at 4:15 p.m., Tuesday, October 26, 1948, with the president, Dr. Cleon A. Nafe, of Indianapolis, presiding.

Dr. George R. Daniels' motion that the attendance slips, signed by the delegates, be accepted in lieu of a roll call was duly seconded, and carried. These slips showed the following members present:

County	*Delegates*
Allen	M. B. Catlett, Fort Wayne
	Arnold H. Duemling, Fort Wayne
	Maurice E. Glock, Fort Wayne
	Arthur J. Roser, Fort Wayne
Bartholomew-Brown	J. E. Dudding, Columbus
Benton	V. L. Turley, Fowler
Boone	R. H. Wiseheart, Lebanon
Carroll	George W. Wagoner, Delphi
Cass	John C. Davis, Logansport
Clark	J. S. Huoni, Jeffersonville
Clay	John M. Palm, Brazil
Clinton	F. A. Beardsley, Frankfort
	C. D. Holmes, Frankfort, alternate
Decatur	Charles Overpeck, Greensburg
Delaware-Blackford	O. A. Hall, Muncie
	Gerald S. Young, Muncie
	William T. Douglas, Montpelier
Elkhart	A. C. Yoder, Goshen
Fayette-Franklin	H. N. Smith, Brookville
Floyd	John M. Paris, New Albany
Fountain-Warren	Lee J. Maris, Attica
	Lowell R. Stephens, Covington
Gibson	Virgil McCarty, Princeton
Grant	Russell W. Lavengood, Marion
Greene	M. S. Mount, Bloomfield
Hancock	R. O. Scott, Charlottesville
	Dee D. Gill, Greenfield, alternate
Harrison	William E. Amy, Corydon
Hendricks	O. T. Scamahorn, Pittsboro
Henry	L. C. Marshall, Mt. Summit
Howard	Elton R. Clarke, Kokomo
Huntington	G. M. Nie, Huntington
Jackson	W. Durbin Day, Seymour
Jasper-Newton	Frank G. Sink, Remington
Jay	George V. Cring, Portland
Johnson	Oran A. Province, Franklin
Knox	Virgil C. McMahan, Vincennes
Kosciusko	Dan L. Urschel, Mentone
Lake	J. Robert Doty, Gary
	H. W. Eggers, Hammond
	Ray Elledge, Hammond
	B. W. Harris, Gary
	C. M. Jones, Whiting
	H. R. Stimson, Gary
	Wm. R. Troutwine, Crown Point, alternate
Lawrence	Claude Dollens, Oolitic
Madison	C. V. Rozelle, Anderson
	G. B. Wilder, Anderson
Marion	Lawson J. Clark, Indianapolis
	R. M. Dearmin, Indianapolis
	Murray DeArmond, Indianapolis
	J. W. Denny, Indianapolis
	Paul G. Iske, Indianapolis
	Harry R. Kerr, Indianapolis
	H. E. Kitterman, Indianapolis
	Norman S. Loomis, Indianapolis
	J. M. Masters, Indianapolis
	Dudley A. Pfaff, Indianapolis
	O. W. Sicks, Indianapolis
	J. M. Whitehead, Indianapolis
	Wm. N. Wishard, Jr., Indianapolis
	J. William Wright, Indianapolis
Marshall	A. A. Thompson, Tyner
Miami	S. D. Malouf, Peru
Montgomery	J. M. Kirtley, Crawfordsville
Morgan	L. M. Hughes, Paragon
Noble	J. R. Nash, Albion
Orange	C. E. Boyd, West Baden Springs
Owen-Monroe	William A. Karsell, Bloomington
	Abraham M. Owen, Bloomington
Parke-Vermillion	B. M. Merrell, Rockville
	S. C. Darroch, Cayuga
Pike	Milton H. Omstead, Petersburg
Porter	Theodore Makovsky, Valparaiso
Posey	William B. Challman, Mt. Vernon
Putnam	Charles L. Aker, Greencastle
Randolph	Lowell W. Painter, Winchester
St. Joseph	Erwin Blackburn, South Bend
	F. R. Nicholas Carter, South Bend
	Marshall I. Hewitt, South Bend
	Joseph F. Murphy, South Bend
Scott	M. L. McClain, Scottsburg
Spencer	John C. Glackman, Jr., Rockport
Tippecanoe	Gordon A. Thomas, LaFayette
Tipton	A. E. Stouder, Kempton
Vanderburgh	Paul D. Crimm, Evansville
	L. Paul Hart, Evansville
	C. C. Herzer, Evansville
	Minor Miller, Evansville
Vigo	Ernest O. Nay, Terre Haute
	M. C. Topping, Terre Haute
Wabash	G. W. Seward, North Manchester
Warrick	Ralph E. Zwickel, Newburgh
Washington	Irvin E. Huckleberry, Salem
Wayne-Union	Harry P. Ross, Richmond
	W. A. Thompson, Liberty
Wells	Truman E. Caylor, Bluffton
White	N. A. Hibner, Monticello
Whitley	B. F. Pence, Columbia City

Councilors

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2nd District—J. H. Crowder, Sullivan
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10th District—W. H. Howard, Hammond
11th District—C. S. Black, Warren
12th District—Paul A. Garber, South Whitley
13th District—Alfred Ellison, South Bend

Past Presidents

Charles N. Combs, Terre Haute
G. R. Daniels, Marion
Herman M. Baker, Evansville
E. M. VanBuskirk, Fort Wayne
A. M. Mitchell, Terre Haute
C. H. McCaskey, Indianapolis
J. E. Ferrell, Fortville
Floyd T. Romberger, Lafayette

Officers

Cleon A. Nafe, Indianapolis, president
A. P. Hauss, New Albany, president-elect
A. F. Weyerbacher, Indianapolis, treasurer
Walter L. Portteus, Franklin, Executive Committee member
Ray E. Smith, executive secretary

Delegates to A.M.A.

William M. Cockrum, Evansville
Homer G. Hamer, Indianapolis

Dr. William E. Amy, chairman of the Reference Committee on Credentials, announced that a constitutional quorum of delegates was present.

THE PRESIDENT: According to Chapter IV, Section 3, of the By-Laws, twenty delegates constitute a quorum. The House of Delegates, therefore, is declared open and ready for the transaction of business.

The By-Laws may be amended at any annual session by a *majority vote of all delegates present at that session*, after the amendment has laid on the table for one day. (Chapter XIV, Section 1, of By-Laws).

The House of Delegates may amend any article of the Constitution by a *two-thirds vote of all delegates present* at any annual session provided that such amendment shall have been presented in open meeting at the previous annual session and that it shall have been published twice during the year in THE JOURNAL. (Article XIV, Constitution).

In Memoriam

THE PRESIDENT: At this time I would like to read the names of those who were members of this House of Delegates or who served the state association in an official capacity and who have died since the last annual session.

HENRY R. ALBURGER, Indianapolis. Chairman, Committee on Pathology 1908 through 1914; member, Committee on Scientific Demonstrations 1914-1915; member, Committee on Scientific Exhibit 1916.

PAUL BEARD, Indianapolis. Secretary, 1936, Vice-chairman, 1937, and Chairman, 1938, of the Section on Surgery; member of Committee on State Fair, 1938.

JAMES W. BENHAM, Columbus. Secretary Bartholomew County Medical Society, 1916 through 1918.

HARRY BOYD-SNEE, South Bend. Vice-chairman, 1923, and chairman, 1924, Section on Ophthalmology and Otolaryngology.

C. H. BRUNER, Greenfield. Secretary, Hancock County Medical Society, 1918 through 1927.

C. M. CLARK, Oakland City. Delegate from Gibson County 1934 through 1939, and 1941, 1942, 1944, 1945 and 1946.

ROSS COOPER, Carmel. Secretary of Hamilton County Medical Society 1917 and 1926. Member of Committee for the Study of Puerperal Mortality 1934, 1935 and 1936.

H. H. DEEN, Leavenworth. Secretary of Crawford County Medical Society 1944 through 1947. Delegate from Crawford County 1942.

A. T. FAGALY, Lawrenceburg. Secretary of Dearborn-Ohio County Medical Society 1926, 1927 and 1928.

A. B. GRAHAM, Indianapolis. Chairman of Committee on Arrangements 1911 and 1912; secretary of Medical Section 1913 and 1914; member of Committee on Arrangements 1914, 1915, 1921 and 1924; president-elect 1930; president of state association 1931; member of Executive Committee 1931; member of Committee on Budget 1931 and 1932.

D. M. HINES, Auburn. Secretary of Dekalb County Medical Society 1910, 1911, 1913, 1914 and 1920.

M. R. LOHMAN, Fort Wayne. Member of Township Trustees Liaison Committee 1936; member of Committee on Public Relations 1938; chairman of Committee on Convention Arrangements 1939; member of Committee to Study Cultists and Irregular Practitioners 1940 through 1943; member of Committee on Public Policy and Legislation 1944 and 1945; member of Committee on Establishment of Board of Certification for the General Practice of Medicine 1946; member of Scholarship Committee 1947; member of Committee on Medical and Nursing School Scholarships 1948; delegate from Allen County 1934 through 1945.

JOHN F. LOOMIS, Marion. Member of Committee on Arrangements 1925.

S. L. McPHERSON, Washington. Secretary of Daviess County Medical Society 1920; delegate from Daviess-Martin County Medical Society 1936 through 1942.

C. F. RENDEL, Mexico. Delegate from Miami County, 1934.

H. BROOKS SMITH, Bluffton. Secretary of Wells County Medical Society 1943 through 1946; member Committee on Conservation of Vision 1946, 1947 and 1948.

W. W. SWARTS, Auburn. Delegate from Dekalb County 1943.

FRED B. WISHARD, Anderson. Member 1938, 1939, 1940, 1942 and 1946, and chairman 1943, 1944 and 1947 of Committee on Civic and Industrial Relations; member of Committee on Industrial Health 1944 and 1945.

WILLIAM V. WOODS, Indianapolis. Member of Committee on State Fair 1935.

We will now stand in silent tribute to these members.

(On motion of Dr. Arnold H. Duemling, duly seconded, the minutes of the 1947 meetings of the House, as published in THE JOURNAL, were accepted).

THE PRESIDENT: According to Article V of the Constitution, the A.M.A. delegates have the right to sit in the House of Delegates, with the privilege of the floor, but with no power to vote. As you know, these men are:

Delegates	*Alternates*
H.G. Hamer, Indianapolis	Karl R. Ruddell, Indianapolis
A. S. Giordano, South Bend	E. S. Jones, Hammond
F. S. Crockett, Lafayette	A. M. Mitchell, Terre Haute
Wm. M. Cockrum, Evansville	Norman M. Beatty, Indianapolis

All members of the association who desire are invited to sit in the House of Delegates meetings, except when the House is in executive session.

In accordance with Chapter IX, Section 1, of the By-Laws of the association, I have appointed ten reference committees. Each committee consists of five members; the first man named is chairman. I would like to ask that the members of each of these committees please stand when their names are read.

1948 REFERENCE COMMITTEES

1. Sections and Section Work:

Chairman, V. L. Turley, Fowler (Benton)
Ray Elledge, Hammond (Lake)
Harry R. Kerr, Indianapolis (Marion)
Lee Maris, Attica (Fountain-Warren)
Paul D. Crimm, Evansville (Vanderburgh)

2. Rules and Order of Business:

Chairman, G. M. Nie, Huntington (Huntington)
M. S. Mount, Bloomfield (Greene)
C. V. Rozelle, Anderson (Madison)
James W. Denny, Indianapolis (Marion)
Milton Omstead, Petersburg (Pike)

3. Medical Education and Hospitals:
Chairman, Maurice Glock, Fort Wayne (Allen)
Lawson J. Clark, Indianapolis (Marion)
Josephine Murphy, South Bend (St. Joseph)
G. W. Seward, North Manchester, (Wabash)
Charles Overpeck, Greensburg (Decatur)

4. Public Policy and Legislation:
Chairman, William N. Wishard, Jr., Indianapolis (Marion)
Abraham M. Owen, Bloomington (Owen-Monroe)
Floyd T. Romberger, Lafayette (Tippecanoe)
E. H. Clauser, Muncie (Delaware-Blackford)
A. C. Yoder, Goshen (Elkhart)

5. Publicity:
Chairman, Minor Miller, Evansville (Vanderburgh)
Wemple Dodds, Crawfordsville (Montgomery)
J. William Wright, Indianapolis (Marion)
M. L. McClain, Scottsburgh (Scott)
B. F. Pence, Columbia City (Whitley)

6. Hygiene and Public Health:
Chairman, Harry P. Ross, Richmond (Wayne-Union)
Herman T. Combs, Evansville (Vanderburgh)
Gordon A. Thomas, Lafayette (Tippecanoe)
John Paris, New Albany (Floyd)
Elton R. Clarke, Kokomo (Howard)

7. Amendments to Constitution and By-Laws:
Chairman, F. R. N. Carter, South Bend (St. Joseph)
J. E. Ferrell, Fortville (Hancock)
C. H. McCaskey, Indianapolis (Marion)
E. O. Nay, Terre Haute (Vigo)
W. H. Howard, Hammond (Lake)

8. Reports of Officers:
Chairman, Virgil McCarty, Princeton (Gibson)
Herman M. Baker, Evansville (Vanderburgh)
O. A. Province, Franklin (Johnson)
Robert M. Dearmin, Indianapolis (Marion)
H. W. Eggers, Hammond (Lake)

9. Committee on Credentials:
Chairman, William E. Amy, Corydon (Harrison)
E. V. Herendeen, Rochester (Fulton)
Claude Dollens, Oolitic (Lawrence)
Joseph Dudding, Hope (Bartholomew-Brown)
M. B. Catlett, Fort Wayne (Allen)

10. Committee on Miscellaneous Business:
Chairman, Gerald S. Young, Muncie (Delaware-Blackford)
Norman S. Loomis, Indianapolis (Marion)
William H. Garner, New Albany (Floyd)
Albert Stouder, Kempton (Tipton)
Frank A. Beardsley, Frankfort (Clinton)

Reports of the standing and special committees will be referred to you and you will be expected to report back to the House of Delegates on Thursday. Time will be given at the conclusion of this meeting for the chairman of each reference committee to announce on the floor of the House the time and place his committee is to meet.

REPORTS OF OFFICERS

These reports, except the address of the president and that of the president-elect, are printed in the October JOURNAL and in the Handbook, but each officer will receive five minutes to make any additions to or explanation of the reports already published. The president's address, to be made before the general meeting on Wednesday, will be referred to the Reference Committee on Reports of Officers, with the exception of that part entitled, "Medical Education and Hospitals," which will be referred to the Reference Committee on Medical Education and Hospitals.

At this time it gives me great pleasure to present to you your president-elect, Dr. Hauss.

Address of President-elect

DR. AUGUSTUS P. HAUSS: Mr. President, Members of the House of Delegates of the Indiana State Medical Association:

Again I wish to thank you and to express my appreciation for the high honor you bestowed upon me at the 1947 annual session of our association. I am even more grateful and appreciative of the exceptional honor of becoming the centennial president of this great state medical association in 1949.

At the French Lick Session I accepted your assignment not only as an honor, but as a further call to duty, a job to be done, and a re-enlistment in the ranks of my professional colleagues in Indiana.

During the past year I have been serving an arduous apprenticeship in the workshops of organized medicine, and consider myself most fortunate in having as my preceptor your able president, Dr. Nafe.

During my apprenticeship I have had the benefit of close association with the officers of our organization, the headquarters personnel, the Executive Committee, the Council, and I have attended many county and district society meetings and conferences of your state committees.

These personal contacts, in the workshops of Indiana medicine, have inspired in me a feeling of pride in our state organization. I have a profound respect and admiration for you men who are giving your time to serve your colleagues and aid in the advancement of scientific medicine and the health of the people.

I am much impressed with the splendid progress of our Mutual Medical Insurance and the valuable service it is providing for the people of Indiana.

I marvel at the tremendous amount of administrative work and informative service that is accomplished in our headquarters office, with a minimum of employed personnel and some very obsolete office appliances. Perhaps some day we will consider it advisable to place our headquarters on a par with other state medical associations.

I doff my hat to the splendid work of our Woman's Auxiliaries.

I salute this house of Delegates as my commander. I respect you as the governing body of our organization. I shall welcome your directives and shall endeavor to carry out your mandates. I ask for your counsel and I beg you to tell me frankly whenever I am wrong.

Through the years I have observed your sincere deliberations, admired your courageous actions, and seldom have I questioned the wisdom of your decisions. It is my prayer that you continue into the new century as the great democratic and deliberative body you have been during most of the past hundred years. I ask that this House continue to speak for yourself, freely, individually and collectively, honestly and unselfishly, without restriction or dictation.

With the utmost respect for those who have expressed a different opinion, I say, "I do not believe you need a Speaker of the House to speak for you."

I come to you today with no program for adoption and recommend no policies for your official action. These are the prerogatives of the president, and not of the apprentice.

I shall not attempt to discuss the major problems and vital issues that now confront the American medical profession. Many of these have been ably presented by Dr. Nafe, in his state papers and in his President's Page in THE JOURNAL. Nor shall I eulogize the power of our organization. Power alone is a destructive thing and usually destroys itself. The real value of organization is in the service it renders to its members in providing service to those its members serve.

Huxley, the great physiologist, said, "Sit down before the facts as a little child, or you will know nothing."

Knowing nothing for sure, I have been sitting down before the facts for many months, and I am going to say to you many things I have said many times before.

Frankly, I cannot find any great crime that we have committed, but I do find many misdemeanors and neglects of duty that are destroying the public's respect for our noble profession. I cannot accuse, without first confessing "I, too, am guilty."

It is the little things I am going to speak about, mole hills, magnified into mountains in the public eye.

It was Julius Caesar who said, "Men willingly believe what they wish." The time has come when we can no longer believe what we wish, but we must face the facts.

Too often we have been a self-admiration society, and indulge too frequently in patting ourselves on the back. We are great birds of fine plumage, and proudly we strut like the peacock, forgetting that we, too, have some ugly feet. And, like the ostrich, we have buried our heads in the sands of professional superiority, so we will not see the storm cloud of public disapproval that is developing. Little do we seem to realize that our coveted rear ends are hoisted in the path of an approaching cyclone, and that our beautiful tail feathers are being torn off, one by one.

Today, whether you believe it or not, we face the probability of some form of federalized or socialized medicine, and possible federal allocation and distribution of physicians. Day by day we see contract practice by clinic and lay groups and federal agencies taking away more of the patients of the private physicians. We see duly licensed practitioners, members of our own societies, being barred from treating their own patients in hospitals and having the hospital door slammed in their faces by their own colleagues. We see hospitals under lay management, with closed staffs on salary, practicing medicine in and outside the hospital in unfair competition to the private physicians of the community. Last, but not least, in the modern trends and perhaps vicious cycle of medical economics, we see some of the great medical schools and universities amending their charters and fostering legislative enabling acts, to permit them to practice medicine for profit, in direct competition to their own alumni and future graduates. There are two sides to all things, but I cannot endorse these modern tendencies in their present form.

Unfortunately, too many doctors here in Indianapolis, down in New Albany where I come from, and in every county in Indiana, and elsewhere in these United States, are saying to themselves: "All this does not concern me; there is nothing I can do about it." The fact of the matter is, YOU are the only ones who can do anything about it.

Your state association cannot do it; the A.M.A. cannot do it; and our salvation does not lie in the ballot box. It is true that much of this movement to alter the practice of medicine in the American way is the result of political maneuvering for votes, the lust of lay groups for power, and is a panacea and a siren call for the ne'er-do-well, and the large proportion of our population who never prepares for a rainy day.

Regardless of the outcome of next Tuesday's national election, compulsory health insurance and state medicine will continue to be a political and economic issue in America. State or socialized medicine would not be a political issue today if it were not a popular issue. It would not be a popular issue if the folks back home were satisfied with the kind of medical service we are providing for them.

I say to you that you, as officers and the chosen delegates of our county societies, are the grass roots of American medicine. Our national and state organizations and all our associated bureaucracies can only forestall the enemy, while you put your own house in order and change public opinion.

Babies must not be born on the sidewalks of New Albany or die on the Mayor's desk in the city of Indianapolis, while the parents frantically plead for a doctor and a hospital bed.

People must not suffer throughout the night, on Wednesday afternoon, or all day on Sunday because

doctors are not usually available at these times.

Let us just suppose what a cry of indignation there would be if all the firemen took off on Wednesday afternoon, and you were told to let your house burn until Thursday.

"Kickbacks" to one of our specialty groups recently became a subject of national comment. This is no different or more unethical than the fee-splitting that goes on in many counties in Indiana. These practices are all unethical, unfair, and unnecessary, and are not professionally sound.

A doctor is entitled to a fee for his services and there is no logical reason for collecting compensation by subterfuge or deceit.

We cannot severely condemn those of our colleagues who have been caught, while we are also guilty of countenancing and winking at these known unethical practices.

Forgive me for mentioning these "unmentionables." Censure me if you wish. It is far better to wash our linens here, in our own house, than to have them washed in the public square.

We hear a great hue and cry about the high cost of medical care, and find that much of this increased cost is due to the high cost of nursing and hospital care; but we also find that the charlatan of old is back in our fold.

He treats a case of simple sore throat with fifty dollars worth of penicillin, the same kind of a throat that Grandma cured overnight with two aspirin tablets and an old sock around the neck.

Cough twice and the patient is on the way to the hospital for every known test in Todd and Sanford's book, three nurses, two consultants, two hundred dollars' worth of streptomycin, a couple of pitchers of glucose, and a bucket of blood.

"GROSS EXAGGERATIONS," you say! For the purpose of emphasis? Yes! Sensational and exceptional incidents? Certainly! But they are happening here in Indiana, and are the few specked apples that spoil the barrel.

I am not convinced that the million dollar fund that is now being raised by the A.P.C. will solve our problems, and I cannot endorse the proposed sit-down strike of the A.A.P.C., while mankind suffers and dies.

If a million dollars is needed to inform and educate the public, let the A.M.A. provide and spend that million. I believe they could do a far better job than is now being done.

The real answer is back home at the crossroads, in the villages, and in the metropolitan center, as well. It entails full coverage and a square deal on the local level, with adequate medical care for all the sick, real or imaginary, among the rich, the poor, the undeserving and imposter, day and night, Sunday and Wednesday afternoon, too.

In 1949 we celebrate our centennial and pay tribute to a glorious one hundred years of organized medicine in Indiana; a century of medical progress, scientific achievements and service to humanity.

I shall ask our county societies to devote more of their meetings to the study and discussion of medical economics and legislation, and to their local problems of adequate and ethical medical care, and I especially urge them to interest and train their younger men in medical organization work.

I shall add much new and younger blood to our state committees, and I see the need for several new fact-finding bodies and liaison groups.

It is my sincere wish that you men with whom I have worked and who have served so well in the high places of our organization, as officers and members of our Council, Executive Committee and this House of Delegates, will continue to work at my side through the end of the century.

In our centennial year, it is my hope that our great state medical association will take the initiative in correlating and forming a closer alliance with all the meritorious agencies of health, in order to present a united front. I also recommend that our county societies cooperate with the local health councils.

Our state public health department, our great Indiana University Medical School, our state hospitals for the care of the indigent, our school health departments, the nurses organizations, the Hospital Associations, the Dentists and Pharmaceutical Associations, the Cancer Society, the Heart Association, the Foundation for Infantile Paralysis, the Red Cross, the Tuberculosis Society, and many other lay and professional groups, are all recognized agencies endeavoring to solve or serve some phase of health.

They, definitely, need active cooperation and counsel from the medical profession. We cannot honestly criticize their programs if we fail to assist them in their plans.

It is my dream that our great state medical association will receive on its one hundredth birthday, the honorable and glorious tribute it deserves. The foundation for the celebration of this great occasion has been ably handled by Dr. Charles N. Combs and his Centennial Committee. They are to be commended for the splendid work they have done. Contrary to the expressions of a few, I want no hilarious fiesta, and definitely it should not be just another convention.

I dream of a great scientific and historical centennial meeting as a state-wide tribute to the rugged individualism and courageous initiative of the pioneers of organized medicine; a pageantry of a hundred years of progress in scientific medical service in Indiana, and an artistic, cultural, and inspiring program of the finest in music and entertainment.

I shall ask that our Centennial Session be opened with a prayer for divine guidance and closed with a sacred benediction. Nothing less will fit the occasion.

In conclusion: It is my prayer that our great American medical schools will teach more of the humanitarian side of medicine and will instill in the minds of the future young physicians a profound realization that the practice of medicine is a self-sacrificing service to humanity, a sacred trust; the noblest of all the professions—not a business or a trade.

I pray that our county medical societies will realize that they are the atomic force that can destroy or immortalize American medicine.

Indiana stands at the dawn of a new century in medicine, an atomic century with a horizon unlimited—IF we remain free men.

(Referred to Reference Committee on Reports of Officers.)

Report of Executive Secretary

Referred to Reference Committee on Reports of Officers.

Report of Treasurer

Referred to Reference Committee on Reports of Officers.

Report of Chairman of Council

Referred to Reference Committee on Reports of Officers.

Reports of Councilors

Referred to Reference Committee on Reports of Officers.

REPORTS OF STANDING AND SPECIAL COMMITTEES

THE PRESIDENT: These reports are printed in the October JOURNAL and in the Handbook, but each chairman will be given five minutes in which to make any additions to or explanation of his report, if he so desires. I personally feel that there may be in these reports some things which the House of Delegates may ask questions about and may debate on Thursday. I should like to ask that the chairmen of these committees be asked to be present and be allowed to speak at that time. (Taken by consent.)

Executive Committee

Referred to Reference Committee on Reports of Officers.

Convention Arrangements

Referred to Reference Committee on Miscellaneous Business.

Committee on Scientific Work

Referred to Reference Committee on Sections and Section Work.

Public Policy and Legislation

Report published in the October JOURNAL and in the Handbook, and supplementary report given by Dr. N. M. Beatty, co-chairman of the Legislative Committee, in executive session of the House following the regular session, referred to the Reference Committee on Public Policy and Legislation.

Committee on Publicity

Referred to Reference Committee on Publicity.

Industrial and Civic Relationship

Referred to Reference Committee on Amendments to Constitution and By-Laws.

Medical Education and Hospitals

The report published in the October JOURNAL and the following supplemental report presented by Dr. Herman M. Baker, chairman, were referred to the Reference Committee on Medical Education and Hospitals:

DR. HERMAN M. BAKER: There was a great deal of discussion and question about one of the actions taken by the committee during the winter with regard to the business of payment and collection of fees for full-time professors at the medical school. So, at the request of President Wells of Indiana University, a dinner meeting was held at the University Hospitals on October 21, 1948. This meeting was attended by President Wells, Dean Van Nuys, Dr. Dillon Geiger representing the Board of Trustees, Dr. Merrill Davis, President of the Medical Alumni Association, Drs. Ellison, Weyerbacher, Portteus, and Nafe, and Mr. Ray Smith representing the Executive Committee of the Indiana State Medical Association, and Dr. Bert Ellis and Joseph Palmer, president and secretary respectively of the Indianapolis Medical Society.

The purpose of the meeting was to discuss the previously discussed method of handling the private patients of the so-called full time staff at the Medical School.

The following agreements were reached:

1. Indiana University would not embark upon a plan of collecting fees for the services of these full time physicians for private medical care.

2. These physicians would be allowed to have a few private patients, but they individually would collect the fees for the professional care of these patients.

3. It was to be the policy that these full time heads of departments would accept only unusual and difficult cases, referred by physicians in the same specialty, and they would be expected to charge the prevailing fee in the community, or above, for these services.

4. It was further agreed that the amount of money which the physician received for private services would be deducted from the salary guaranteed to the professor for his services by the University, so that the amount of his salary will remain constant.

It was the unanimous opinion of the representatives of the medical profession attending this conference that this arrangement eliminated the objection previously raised of the plan of the Medical School charging and collecting fees for the services of its full time physicians. It was recognized that there might be some objection to this plan, but that it retained the privilege of a private physician collecting fees for private medical services, and prevented the University from enter-

ing this field. It also gave these physicians the right of a limited private practice.

It was agreed that this plan would be placed before the Council and the House of Delegates of the Indiana State Medical Association for their consideration, and if approved, the action would be publicized to the members of the Indiana State Medical Association and request their support of the University Medical School in their difficult responsibilities.

Public Relations

Referred to Reference Committee on Public Policy and Legislation.

Auditing

Referred to Reference Committee on Reports of Officers.

Cancer

Referred to Reference Committee on Hygiene and Public Health.

Centennial Celebration and History

Report published in October JOURNAL and following report referred to Reference Committee on Publicity:

DR. CHARLES N. COMBS, Chairman: I want to ask this House of Delegates to do something within the next twenty-four or forty-eight hours. Our book, to be published within the next year, *One Hundred Years of Indiana Medicine*, has been sanctioned by the Council. Our problem now is to sell it. We have inserted order blanks in two issues of THE JOURNAL. How many returns do you think we have received so far? 250. I want each member of this House of Delegates to buttonhole every friend he has and ask him to buy a book. We are looking to the president to energize the councilors, and to the councilors to energize the secretaries to take this selling campaign into each county. Every member of each county medical society and each library in every county should have a copy.

Conservation of Vision

Referred to Reference Committee on Hygiene and Public Health.

Constitution and By-Laws

Referred to Reference Committee on Amendments to Constitution and By-Laws.

Crippled Children Services

Referred to Reference Committee on Public Policy and Legislation.

Hard of Hearing

Referred to Reference Committee on Hygiene and Public Health.

Heart Disease

Referred to Reference Committee on Hygiene and Public Health.

Committee on Indiana Inter-Professional Health Council

Referred to Reference Committee on Miscellaneous Business.

Indigent Medical Care

Referred to Reference Committee on Public Policy and Legislation.

Industrial Health

Referred to Reference Committee on Hygiene and Public Health.

Infantile Paralysis

Referred to Reference Committee on Hygiene and Public Health.

Instructional Courses

Referred to Reference Committee on Sections and Section Work.

Maternal and Child Health

Referred to Reference Committee on Public Policy and Legislation.

Medical and Nursing School Scholarships

Referred to Reference Committee on Medical Education and Hospitals.

Mental Health

Referred to Reference Committee on Hygiene and Public Health.

Necrology

Referred to Reference Committee on Miscellaneous Business.

Rural Medical Care

Referred to Reference Committee on Public Policy and Legislation.

School Health and Physical Education

Referred to Reference Committee on Hygiene and Public Health.

Scientific Exhibit

Referred to Reference Committee on Sections and Section Work.

Secretaries' Conference

Referred to Reference Committee on Miscellaneous Business.

State Fair

Referred to Reference Committee on Publicity.

Traffic Safety

Referred to Reference Committee on Hygiene and Public Health.

Tuberculosis

Referred to Reference Committee on Hygiene and Public Health.

Venereal Disease

Referred to Reference Committee on Hygiene and Public Health.

Veterans Affairs and Rehabilitation

Report published in October JOURNAL and the following supplementary report, presented by Dr. Charles F. Thompson, chairman, were referred to the Reference Committee on Miscellaneous Business:

SUBJECT: Proposals to component county societies of the Indiana State Medical Association in anticipation of a National Emergency.

I. In the event that physicians will again be allocated for service with the army (General Bliss estimates an increase of medical personnel of 4,000 before July 1949—Indiana quota

of such would be approximately 90) or recruited in a national emergency, it is recommended that county societies consider the following classes for allocation in priority as numbered.

1. ASTP and V-12 trainees and other recent graduates who have not served on active duty as Medical Officers or in the armed forces prior to June 1946 (Ex-GI's).
2. The same trainees and recent graduates who have served as Medical Officers less than one year.
3. Physicians who did not serve as Medical Officers during World War II.
4. The trainees and recent graduates designated in 1 and 2 who have had less than two years active duty as Medical Officers or as soldiers or sailors.
5. Same as 4 with more than two years service.
6. Former Medical officers in order according to period of active duty with Armed Forces.

II. That professional qualifications or skill in a specialty of allottee be verified by his county society for the purpose of proper duty assignment.

III. In anticipation of a civilian emergency or catastrophe arising out of an act of war the following plan be accomplished at the earliest possible date.

1. Organization of Emergency Medical teams consisting of:
   a. Doctors
   b. Nurses
   c. Former medical technicians or trained first aid personnel and including vehicles for transportation to adjacent communities together with proper medical supplies.
2. Immunization of industrial workers. Immunization against typhoid fever and tetanus of industrial workers and other groups of civilians who might be liable to mass injury in an act of war. This plan should be carried out with the sanctions and under supervision of the Committee on Industrial Health of the Indiana State Medical Association and the Indiana State Board of Health.
3. Blood typing of the same group of civilians and adequate record of such for the purpose of emergency whole blood donation or supplementing blood banks.

CHARLES F. THOMPSON
GLEN W. LEE
W. W. WASHBURN
WM. H. GARNER
DUDLEY A. PFAFF
FRANK B. RAMSEY
JOHN S. HASH

The Journal

Referred to Reference Committee on Reports of Officers.

Communications

THE PRESIDENT: Communications that have been received during the year have been referred to the various standing and special committees, or the Council, and have been disposed of. This indicates active, working committees.

Election of Indiana "General Practitioner of the Year"

As recommended by the House of Delegates at the 1947 annual session, and following procedure similar to that inaugurated by the American Medical Association in selecting the national general practitioner, the chairman of the Council reported that out of fifteen names submitted by county medical societies, the Council had selected the following three physicians for consideration of the House for this award:

C. C. DuBois, Warsaw
G. H. Kamman, Seymour
D. D. Oak, LaCrosse

On ballot vote, Dr. D. D. Oak, of LaCrosse, was elected "General Practitioner of the Year."

New Business

1. *Improper Medical Testimony in Industrial Cases.* Dr. Alfred Ellison, Chairman of the Council, presented the following report of the committee of the Council, which was appointed some time ago to study the matter of false testimony in industrial cases, which the Council had directed be referred to the House:

REPORT OF SPECIAL COMMITTEE APPOINTED TO INVESTIGATE THE MATTER OF IMPROPER MEDICAL TESTIMONY IN INDUSTRIAL CASES.

This committee is composed of Drs. E. H. Clauser and W. H. Garner, with myself as chairman. We have given some thought to the problem involved, which, briefly stated, is this:

What can the medical profession do to discourage the giving of false testimony in industrial cases?

This evil assumes its worst form when a physician conspires with an attorney to build up the measure of damages by presenting exaggerated testimony of the percentage of disability resulting from industrial accidents or diseases.

In Lake County the County Medical Council is a body to which transcripts of medical testimony may be submitted for their scrutiny and a report. This has been effectual in causing some cases built upon an entirely fictitious foundation to be dropped even before they came to trial; and also, we believe, in keeping the testimony within the honest judgment and knowledge of the expert witness. So, as chairman of this committee, I suggest that the following remedy be provided:

(a) Either have a separate committee, an existing standing committee or the state council as a group of physicians to whom either party to an industrial case may send a transcript of the medical testimony for examination, study and report.

(b) Acquaint physicians and lawyers with the existence of this committee and encourage them to have accurate verbatim reports of testimony which can be transcribed for submission to the committee.

(c) Instruct the committee to give any physician whose testimony is under scrutiny notice of that fact and opportunity to appear before the committee to justify his testimony.

(d) Instruct the committee that when it has completed its hearing and study in any case it should make a written report, one copy of which should be given to the attorneys for each party in the case, and one copy of which would be sent to the Industrial Board.

(e) Instruct the committee to have no hearings and make no study of the case until after the evidence has been introduced and the case finally decided, so that there can be no possibility of the activity of the committee ever being construed as activity intended to bias or prejudice the decision of the case, and such activity thereby be regarded as contempt of court.

Dr. Mitchell moved that a committee be obtained from the Bar Association so that both the medical and the legal professions might cooperate in arriving at the truth in industrial cases as fully as possible.

This report was approved by the Council and it is my purpose to submit this report to the House of Delegates and I hereby move its approval.

W. H. HOWARD, *Chairman*
W. H. GARNER
E. H. CLAUSER

(Referred to Reference Committee on Public Policy and Legislation.)

2. *Resolution of St. Joseph County Medical Society, presented by Dr. F. R. N. Carter, South Bend*

WHEREAS, the Constitution of the Indiana State Medical Association, Article IV, Section V, provides in part that "any physician of the State of Indiana who has attained the age of seventy-five years and has held membership in the Indiana State Medical Association for twenty years or more may be elected to honorary membership . . ." and

WHEREAS, the St. Joseph County Medical Society feels that the age requirement of seventy-five years is too great and should be reduced to seventy years,

NOW THEREFORE, be it resolved that the Delegates of the St. Joseph County Medical Society present a resolution at the House of Delegates meeting of the Indiana State Medical Association being held in Indianapolis in October 1948, requesting an amendment to Article IV, Section V, of the Constitution of the Indiana State Medical Association, reducing the age requirements to qualify for honorary membership in the State Association from seventy-five to seventy years of age.

(Referred to the Reference Committee on Amendments to Constitution and By-Laws.)

3. *Resolution in regard to hospitalization of war veterans, presented by Dr. Paul D. Crimm, Evansville:*

WHEREAS, there are many veterans of World War II with service-connected disabilities who cannot receive medical care in Veterans Hospitals due to the overcrowding of facilities;

AND WHEREAS, approximately 75 per cent of the patients now are receiving treatment in these hospitals for non-service-connected illnesses, many of whom can afford to pay for such medical care;

AND WHEREAS, these hospitals were created for the purpose of treating patients who have been disabled during their term of service with the Armed Forces of the United States;

NOW THEREFORE, be it resolved that this House of Delegates of the Indiana State Medical Association go on record as urging that treatment of veterans in Veterans' Facilities be limited to those patients with definite service connected illnesses and disabilities.

PAUL D. CRIMM, *Delegate*
Vanderburgh County Medical Society
MINOR MILLER, *Delegate*
Vanderburgh County Medical Society
C. C. HERZER, *Delegate*
Vanderburgh County Medical Society
WILLIAM B. CHALLMAN, *Delegate*
Posey County Medical Society

(Referred to Reference Committee on Miscellaneous Business.)

4. *Resolution from Indianapolis Medical Society regarding compulsory attendance at medical meetings, presented by Dr. James W. Denny, Indianapolis:*

"We, the members of the Indianapolis Medical Society, do hereby resolve that the welfare of the medical profession, its scientific advancement and the furtherance of public interest are continuously being harmed by organizations which demand compulsory attendance of physicians at meetings.

"To this end we instruct our duly elected delegates to the Indiana State Medical Association to introduce proper measures at the next meeting of the House of Delegates to the effect that all organizations which require compulsory attendance at their meetings no longer be approved by the American Medical Association; and we further instruct our delegates to use their utmost influence to obtain passage of such a resolution at the earliest opportunity before the House of Delegates of the American Medical Association.

"The Indianapolis Medical Society furthermore instructs its secretary to send a copy of this resolution to every component Medical Society in the United States."

(Referred to Reference Committee on Medical Education and Hospitals.)

5. *Resolution on national "Diabetes Week," presented by Dr. J. Melvin Masters, Indianapolis:*

WHEREAS, the medical profession has always recognized its obligations for the discovery, treatment, and prevention of diabetes mellitus; and

WHEREAS, the number of latent and undiscovered diabetic patients in the United States, according to surveys, is much larger than had been supposed and is estimated to be about one million persons; and

WHEREAS, there exists also a large number of patients whose diabetes is neglected and who are therefore under ineffective and no treatment; and

WHEREAS, The American Diabetes Association, Inc., whose membership consists of more than one thousand doctors interested in diabetes, has appointed a committee to formulate plans for a national "Diabetes Week," December 6 to 12, 1948; and

WHEREAS, the purpose of this effort is to assist doctors and local committees in effectively carrying out continuing plans for discovering the unknown diabetics and guiding them to their physicians, and for spreading widely to the public information about diabetes; and

WHEREAS, this is to be a doctors' project, of the profession, by the profession, and for the public; and

WHEREAS, to achieve the aims of "Diabetes Week," the American Diabetes Association seeks to enlist the formal support and active cooperation of the medical profession through the American Medical Association and its constituent and component societies;

Be it resolved, therefore, that the Indiana State Medical Association heartily endorses the efforts of the American Diabetes Association in behalf of the undiscovered and untreated diabetic and approve of the plans for a Diabetes Week from December 6 to 12, 1948.

Be it further resolved that a committee on diabetes be appointed in order to enlist the support and cooperation of all practicing physicians within the State of Indiana.

Furthermore be it resolved that the Delegates from the Indiana State Medical Association to the House of Delegates of the American Medical Association be instructed to present this resolution to the

House and recommend that the trustees of the American Medical Association and all state, county, and other medical societies cooperate and participate in the effort to find as many as possible of the unknown diabetics in order to bring them under medical treatment.

(Referred to Reference Committee on Hygiene and Public Health.)

Executive Session

On motion of Drs. George R. Daniels and Paul D. Crimm, the House of Delegates went into executive session to hear the co-chairmen of the Legislative Committee speak.

THE PRESIDENT: The matter of the proposed national insurance company has been discussed by the Executive Committee and the Council at great length. At the Council meeting today, it was suggested that the president of the association call a meeting of the Council, the Board of Directors of Mutual Medical Insurance, Inc., and all such members of the House of Delegates who desire to attend, to discuss thoroughly this issue. I wish to announce that that meeting will be held on Sunday, November 21, in Indianapolis. You will be notified later of the place.

No further business appearing, the House of Delegates adjourned, to meet again at 11:55 a.m., Thursday, October 28, 1948, in the dining room of the Murat Temple.

HOUSE OF DELEGATES

(Indianapolis Session, 1948)

Second Meeting

The second meeting of the House of Delegates, a luncheon meeting, was held October 28, 1948, in the dining room of the Murat Temple, at 11:55 a.m., with the president, Dr. Cleon A. Nafe, presiding.

Roll call showed the following present:

County	Delegates
Allen	M. B. Catlett, Fort Wayne
	Arnold H. Duemling, Fort Wayne
	Maurice E. Glock, Fort Wayne
	Arthur J. Roser, Fort Wayne
Bartholomew	J. E. Dudding, Hope
Benton	V. L. Turley, Fowler
Boone	R. H. Wiseheart, Lebanon
Carroll	George Wagoner, Delphi
Clark	J. T. Carney, Jeffersonville
	J. S. Huoni, Jeffersonville, alternate
Clay	John Palm, Brazil
Clinton	F. A. Beardsley, Frankfort
	C. D. Holmes, Frankfort, alternate
Dearborn-Ohio	J. K. Jackson, Aurora
	Charles N. Manley, Rising Sun
Decatur	Charles Overpeck, Greensburg
DeKalb	Evered E. Rogers, Auburn
Delaware-Blackford	O. A. Hall, Muncie
	Gerald S. Young, Muncie
	William T. Douglas, Montpelier
Elkhart	A. C. Yoder, Goshen
Fountain-Warren	Lee Maris, Attica
	Lowell R. Stephens, Covington
Gibson	Virgil McCarty, Princeton
Grant	Russell Lavengood, Marion
Greene	M. S. Mount, Bloomfield
Hamilton	John S. Hash, Noblesville
Hancock	R. O. Scott, Charlottesville
Harrison	William E. Amy, Corydon
Hendricks	O. T. Scamahorn, Pittsboro
Howard	Elton R. Clarke, Kokomo
Huntington	G. M. Nie, Huntington
Jackson	W. Durbin Day, Seymour
Jasper-Newton	Frank G. Sink, Remington
Jay	George V. Cring, Portland
Jefferson	S. A. Whitsitt, Madison
Johnson	Oran A. Province, Franklin
Knox	Virgil C. McMahan, Vincennes
Kosciusko	Dan Urschel, Mentone
Lake	J. Robert Doty, Gary
	H. W. Eggers, Hammond
	Ray Elledge, Hammond
	B. W. Harris, Gary
	J. Schlesinger, Hammond
	Wm. R. Troutwine, Crown Point
LaPorte	Jon Nelson Kelly, LaPorte
Lawrence	Claude Dollens, Oolitic
Madison	C. V. Rozelle, Anderson
Marion	Lawson J. Clark, Indianapolis
	R. M. Dearmin, Indianapolis
	Harry E. Kitterman, Indianapolis
	J. W. Denny, Indianapolis
	Paul G. Iske, Indianapolis
	Norman S. Loomis, Indianapolis
	J. M. Masters, Indianapolis
	Dudley A. Pfaff, Indianapolis
	O. W. Sicks, Indianapolis
	Sydney L. Stevens, Indianapolis
	Dan E. Talbott, Indianapolis
	J. M. Whitehead, Indianapolis
	Wm. Niles Wishard, Jr., Indianapolis
	J. William Wright, Indianapolis
Marshall	A. A. Thompson, Tyner
Miami	S. D. Malouf, Peru
Montgomery	J. M. Kirtley, Crawfordsville
Morgan	L. M. Hughes, Paragon
Noble	J. R. Nash, Albion
Orange	C. E. Boyd, West Baden Springs
Owen-Monroe	William A. Karsell, Bloomington
	Abraham M. Owen, Bloomington
Parke-Vermillion	B. M. Merrell, Rockville
	S. C. Darroch, Cayuga
Pike	Milton H. Omstead, Petersburg
Posey	William B. Challman, Mt. Vernon
Putnam	Charles L. Aker, Greencastle
Randolph	Lowell W. Painter, Winchester
Ripley	L. H. Hopkins, Versailles
Rush	Melvin H. Denny, Rushville
St. Joseph	E. Blackburn, South Bend
	F. R. Nicholas Carter, South Bend
	Marshall I. Hewitt, South Bend
	Josephine Murphy, South Bend
Scott	M. L. McClain, Scottsburg
Shelby	Roger Whitcomb, Shelbyville
Spencer	John C. Glackman, Jr., Rockport
Sullivan	C. F. Briggs, Sullivan
Tippecanoe	Harry E. Klepinger, LaFayette
	Gordon A. Thomas, LaFayette
Vanderburgh	Paul D. Crimm, Evansville
	L. P. Hart, Evansville
	C. C. Herzer, Evansville
	Minor Miller, Evansville
Vigo	A. W. Cavins, Terre Haute
	Ernest O. Nay, Terre Haute
Wabash	G. W. Seward, North Manchester

County	Delegates
Warrick	Ralph E. Zwickel, Newburgh
Washington	Irvin E. Huckleberry, Salem
Wayne-Union	Harry Plummer Ross, Richmond W. A. Thompson, Liberty
Wells	Truman E. Caylor, Bluffton
White	N. A. Hibner, Monticello
Whitley	B. F. Pence, Columbia City

Councilors

1st District—Herman T. Combs, Evansville
2nd District—J. H. Crowder, Sullivan
3rd District—William H. Garner, New Albany
4th District—George A. May, Madison
6th District—W. U. Kennedy, New Castle
7th District—C. J. Clark, Indianapolis
8th District—E. H. Clauser, Muncie
9th District—W. Dodds, Crawfordsville
10th District—W. H. Howard, Hammond
11th District—C. S. Black, Warren
12th District—Paul A. Garber, South Whitley
13th District—Alfred Ellison, South Bend

Past Presidents

Charles N. Combs, Terre Haute
G. R. Daniels, Marion
C. E. Gillespie, Seymour
F. S. Crockett, LaFayette
R. L. Sensenich, South Bend
Herman M. Baker, Evansville
K. R. Ruddell, Indianapolis
C. H. McCaskey, Indianapolis
J. E. Ferrell, Fortville
Floyd T. Romberger, LaFayette

Officers

Cleon A. Nafé, Indianapolis, president
A. P. Hauss, New Albany, president-elect
A. F. Weyerbacher, Indianapolis, treasurer
W. L. Portteus, Franklin, Executive Committee member
Albert Stump, Indianapolis, attorney
Ray E. Smith, executive secretary

Delegates to A.M.A.

Homer G. Hamer, Indianapolis, delegate
E. S. Jones, Hammond, alternate delegate

County Society Officers

Dallas Fickas, Evansville, president
George W. Willison, Evansville, president-elect
Vanderburgh County Society

THE PRESIDENT: A quorum being present, the House of Delegates is ready for the transaction of business.

Rules and Order of Business

On motion of Dr. G. M. Nie, chairman of the Reference Committee on Rules and Order of Business, seconded by Dr. E. O. Nay, the following report, presented by Dr. Nie, was accepted as the order of business for this meeting of the House:

1. Call to order.
2. Roll call.
3. Election of officers.
   a. President-elect.
   b. Treasurer.
   c. Delegates to A.M.A. to succeed:
      H. G. Hamer, Indianapolis
      A. S. Giordano, South Bend
   d. Alternates to A.M.A. to succeed:
      Karl R. Ruddell, Indianapolis
      E. S. Jones, Hammond
4. Selection of city for 1950 meeting.
5. Introduction of resolutions.
6. Report on election of councilors.
7. Reports of reference committees.
8. Formal resolutions of appreciation.
9. Final words by president and adjournment.

G. M. Nie, M.D., *Chairman*
M. S. Mount, M.D.
C. V. Rozelle, M.D.
James W. Denny, M.D.
Milton Omstead, M.D.

Election of Officers

Election of officers resulted as follows:

President-elect, (1949)	Claude S. Black, Warren
Treasurer	A. F. Weyerbacher, Indianapolis
Delegates to A.M.A., for term expiring December 31, 1950	H. G. Hamer, Indianapolis A. S. Giordano, South Bend
Alternates	Karl R. Ruddell, Indianapolis E. S. Jones, Hammond

DR. CLAUDE S. BLACK: Dr. Nafe, and members of the House of Delegates: First of all, I am going to say I don't know how this ever happened to me. And this seems a little bit out of form, because we all got used to those breakfast meetings, of scrambled eggs, bacon, and buttered toast and coffee. In looking over this program, I have only missed two meetings that are published. They were the Lafayette meeting, and when I was in the Army in World War I, in 1918.

I want you to know that I sure appreciate it, and I think it is the greatest honor that has ever come to me by a fine group of gentlemen like you are, and I have sat in this body for many years.

I am very much like the baseball umpire who was being shown through the bottling works—I am terribly nervous.

Distinguished Guests

At this time the chairman introduced Dr. Paul R. Hawley, chief executive officer of Associated Medical Care Plans, Chicago, and Dr. Roscoe L. Sensenich, South Bend, president of the American Medical Association.

DR. PAUL R. HAWLEY: Mr. President, and my fellow Hoosier physicians: This is one place that I am never afraid to come. Even though I might get into an argument, I know that beneath any differences of opinion that any of us may have we have that common privilege of having been citizens of Indiana and of having practiced medicine here. Thank you very much.

DR. ROSCOE L. SENSENICH: I can't tell you how much I appreciate being here. I am sorry that I was late. It has been my habit to come early and stay throughout the meeting. A little engagement during last week of a couple of days in Washington—I think Dr. Hawley knows about it—rather ruined my schedule, and so I didn't get in until today.

I can't tell you how much I enjoy coming, seeing and knowing you men whom I have known for so many years. There are some new faces, some

younger men whom I don't know so well. Dr. Black a moment ago referred to the old "bacon and eggs." I don't know how many sat in on those breakfasts, but a lot of us did.

Furthermore, I can't convey to you how much it means to come home to the group whom you know, and sit down with them and think about medicine. It has been my interesting, but somewhat rugged duty in the past several years to sit in with a great many different medical groups, and medical groups with lay groups. The last exposures have been in Japan, with the profession there, trying to point out to them how medicine should be done, and later on, again in Europe, this last time the meetings were held with the medical profession of Germany, after the World Medical Association meeting in Geneva, and it was very interesting. Those men, some of them, I think some of you have known. I have known them for a long time. The medical situation in Germany is very, very bad, and from a nation which had an outstanding medical education machinery, it has come to a very low ebb, and I have been very much depressed in these meetings in Munich, Heidelberg, Wiesbaden, Frankfurt, where there are medical schools, to see the great depreciation and the helplessness of this group of medical men. I am glad to be here with you today.

Sometime, when the opportunity comes, I would be glad to tell you something about that, because I am sure you would be interested, but not now. You have business. Thank you.

THE PRESIDENT: At the A.M.C.P., of which Dr. Hawley is a very active member, as you know, one of our own members, Dr. Walter Portteus, was elected Trustee-At-Large of the Associated Medical Care Plans of the United States. Stand and take a bow, Walter. (Applause.)

Place of 1950 Annual Session

On invitation of the Orange County Medical Society, extended by Dr. C. E. Boyd, the 1950 annual session will be held at French Lick.

Introduction of Resolutions

THE PRESIDENT: In order that no one will be deprived of an opportunity to present additional resolutions, or change any resolutions previously introduced, at this annual session, it has been placed into the order of business for this meeting that there may be introduction of additional resolutions, or changes made in resolutions already presented. I now ask that a motion be made that the rules be suspended so that any such resolutions may be considered at this meeting. (Motion made by Dr. C. J. Clark, seconded by Dr. Floyd T. Romberger, and passed.)

1. *Resolution regarding compulsory attendance at medical meetings.* Dr. Norman S. Loomis, Indianapolis, presented and moved the adoption of the following resolution, which had been passed unanimously by the Indianapolis Medical Society, and which, he explained, was to supersede a similar resolution introduced at the October 26 meeting of the House of Delegates by a Marion county delegate:

WHEREAS, the welfare of the Medical Profession, its general scientific advancement and the furtherance of public interest are paramount in the affairs of the Indiana State Medical Association; and

WHEREAS, the welfare of the profession and the public is placed in jeopardy by the continuing demand on the time of physicians for their compulsory attendance at medical meetings; and

WHEREAS, physicians are unable to find the hours to attend the constantly growing number of medical meetings and, at the same time, minister to the health needs of their patients; now

Therefore be it Resolved, that this House of Delegates now assembled go on record as requesting that the American Medical Association no longer give its actual or implied approval of organizations which demand compulsory attendance at medical meetings; and

Be it Further Resolved that the Delegates of the Indiana State Medical Association to the American Medical Association be instructed to present this resolution to the House of Delegates of the American Medical Association at the next meeting of that body.

(Referred to Reference Committee on Medical Education and Hospitals.)

2. *Alternate councilors.* Dr. Alfred Ellison, chairman of the Council, reported that the following motion made by Dr. C. J. Clark and seconded by Dr. C. S. Black, was adopted by the Council at its meeting on October 26:

"That the Council recommend that the By-Laws be changed whereby each councilor district be requested to elect an alternate councilor who will act as a stand-in for the regular councilor."

Dr. Ellison moved that the By-Laws be amended to incorporate this change.

This was referred to the Reference Committee on Amendments to Constitution and By-Laws.

Elections of Councilors

Elections of councilors to replace those whose terms will expire December 31, 1948, were reported as follows:

Second District
William C. Reed, Bloomington

Fifth District
A. M. Mitchell, Terre Haute, re-elected

Eighth District
E. H. Clauser, Muncie, re-elected

Eleventh District
C. S. Black, Warren, re-elected

Special Meeting of House of Delegates, November 21, 1948

The president announced that the special meeting of the House of Delegates to consider the matter of the proposed national insurance company would be held on November 21 in the West Room of the World War Memorial, Indianapolis, the time of day to be announced later.

REPORTS OF REFERENCE COMMITTEES

Sections and Section Work

House of Delegates,
Indiana State Medical Association.

Gentlemen:

To your Reference Committee on Sections and Section Work were referred the reports of Committees on Scientific Work, Instructional Courses, and Scientific Exhibits.

First, your committee wishes to congratulate Dr. Arbogast and his committee on their fine exhibit. It was very interesting and educational.

Secondly, your committee has noted the report of the Committee on Instructional Courses on page 115 in the Handbook and attended some of the instructional courses, and we wish to commend Drs. Sage and Batman and their committee on an excellent job, well done.

Thirdly, Drs. Leser and Reed have given us a very fine program of scientific work and should be congratulated for their efforts.

Also, your committee wishes to bring to your attention the recommendation of your Centennial Committee, concurred in by the Council, that all essayists of the 1949 centennial meeting be either Hoosier born or Hoosier educated.

Mr. President, I move the adoption of this report in its entirety.

V. L. Turley, M.D., *Chairman*
Ray Elledge, M.D.
Harry R. Kerr, M.D.
Lee Maris, M.D.
Paul D. Crimm, M.D.

(Motion for adoption of this report seconded by Dr. George R. Daniels, and carried.)

Medical Education and Hospitals

House of Delegates,
Indiana State Medical Association.

Gentlemen:

We commend the excellent work of the Committee on Medical Education and Hospitals and move the acceptance of its report as printed on pages 51 to 54 of the handbook. (Motion seconded by Dr. Duemling, and carried.)

We move that the supplemental report of the Committee on Medical Education and Hospitals be amended in paragraph 3 by deleting "referred by physicians in the same specialty, and they would be expected to charge the prevailing fee in the community, or above, for these services." (Here Dr. Glock read the agreements reached with I. U. officials. See p. 1290, first meeting of House of Delegates.) We move the acceptance of the supplemental report of the Committee on Medical Education and Hospitals as amended. (Motion seconded by Dr. Arnold H. Duemling, and carried.)

We commend the excellent work of the Committee on Medical and Nursing School Scholarships and move the acceptance of its report as listed in the handbook on pages 117 to 120. (Motion seconded by Dr. John Palm, and carried.)

We move the acceptance of that section of the president's address relating to Medical Education and Hospitals. (Motion seconded by Dr. A. W. Cavins, and carried.)

The subject brought up by the delegates from Marion County, at the first meeting of the House on Tuesday, regarding compulsory attendance at meetings, was not in the form of a formal resolution and could not be approved by this committee in that form. We are in agreement that the situation presented is a serious one and that some action seems to be indicated regarding this problem.

The resolution as presented today by the Marion County delegates regarding compulsory attendance at meetings is in proper form, and we move the acceptance of this resolution. (Motion seconded by Dr. Duemling. Discussed by Drs. Elton R. Clarke, R. L. Sensenich, Maurice Glock, J. M. Kirtley, Herman M. Baker, J. William Wright, Arnold Duemling, C. H. McCaskey, J. W. Denny, C. V. Rozelle, R. M. Dearmin, O. A. Hall, and Karl Ruddell. On voting, the motion for adoption of this portion of the report was passed.)

We move the acceptance of this report as a whole.

Maurice E. Glock, M.D., *Chairman*
Lawson J. Clark, M.D.
Josephine Murphy, M.D.
G. W. Seward, M.D.
Charles Overpeck, M.D.

(Motion seconded by Dr. Duemling, and carried.)

Public Policy and Legislation

House of Delegates,
Indiana State Medical Association.

Gentlemen:

The meeting was held in the Egyptian Room of the Murat Theatre, October 27, 1948, 11:00 a.m. All members of committee were present.

The Reference Committee approved the report of the Committee on Public Policy and Legislation of the Indiana State Medical Association, together with the supplemental report by Dr. Wright and Dr. Beatty. The Reference Committee feels that more importance should be laid on the follow-up bulletins of the Committee on Public Policy and Legislation and that the presidents of the county societies should see to it that the chairmen of the local legislative committees assume and discharge their responsibilities. (Motion for adoption of this section of report seconded by Dr. E. O. Nay, and passed.)

Dr. A. M. Owen, of Bloomington, has an additional supplemental report to make for our committee, and if it meets with the approval of the House of Delegates, we would like to hear from him at this time. (Taken by consent.)

DR. A. M. OWEN: A danger of bacterial warfare attack against the United States exists. The Committee on National Emergency Medical Service, in supplemental report by Dr. Charles Thompson, has recommended that the House of Delegates of the Indiana State Medical Association approve a plan for mass immunization of industrial personnel and such others as might be endangered by such an attack.

Organized medicine is at present standing trial at the bar of public opinion. Our defense is, and should be in the positive as well as the negative phase. I wish to offer a resolution, which I believe will earn more favorable notice than any amount of money spent for advertising our virtues.

Gentlemen, our time may be short.

For reasons of national security, the immunizations should be given by coded number.

Resolution

Mr. President, I move you that the House of Delegates of the Indiana State Medical Association approve the mass immunization of all willing population of the State of Indiana, utilizing the donated services of Indiana physicians, and working under the direction of an appropriate existing committee, or one to be appointed.

(Motion seconded by Dr. J. R. Nash. Discussed by Drs. Gerald S. Young, William B. Challman and Dudley Pfaff. On standing vote, the motion was passed.)

Your Reference Committee approves the report of the Committee on Indigent Medical Care of the Indiana State Medical Association. (Motion for adoption of this part of the report duly seconded, and carried.)

Your Reference Committee approves the report of the Committee on Maternal and Child Health, and moves the adoption of its recommendations by the House of Delegates. (Motion for adoption of this section of report seconded by Dr. Nay, and carried.)

Your Reference Committee approves the report of the Committee on Rural Medical Care. There was discussion of this report and one of the members of the Reference Committee felt that many young men were discouraged from settling in small rural communities because of the lack of diagnostic facilities. It was also felt that modern rapid transit helped to offset this difficulty. (Motion for adoption of this section seconded by Dr. Daniels, and carried.)

Your Reference Committee approved the report of the Special Committee on Improper Medical Testimony in industrial cases and recommends that the House of Delegates adopt this report and print it in full in THE JOURNAL of the Indiana State Medical Association. (Motion for adoption of this section seconded by Dr. M. B. Catlett, and passed.)

We move the acceptance of the whole report.

WILLIAM N. WISHARD, M.D., *Chairman*
ABRAHAM M. OWEN, M.D.
FLOYD T. ROMBERGER, M.D.
E. H. CLAUSER, M.D.
A. C. YODER, M.D.

(Motion for acceptance of the report as a whole seconded by Dr. Daniels, and carried.)

Publicity

House of Delegates
Indiana State Medical Association.

Gentlemen:

Your Reference Committee on Publicity has given careful consideration to the printed reports of the Committees on

Publicity
Centennial Celebration and History
State Fair

We wish to commend the work of the members of these several committees and recommend the adoption of the reports as submitted.

We especially wish to urge that the delegates and the secretaries of the component county medical societies make every effort to promote the sale of the copies of *One Hundred Years of Indiana Medicine* and also to call to your attention the fact that the state association is defraying a portion of the expense of publication.

MINOR MILLER, M.D., *Chairman*
WEMPLE DODD, M.D.
J. WILLIAM WRIGHT, M.D.
M. L. MCCLAIN, M.D.
B. F. PENCE, M.D.

(Dr. Miller's motion for adoption of this report was seconded by Dr. Daniels, and carried.)

Hygiene and Public Health

House of Delegates,
Indiana State Medical Association.

Gentlemen:

Your Reference Committee on Hygiene and Public Health wishes to submit the following report.

The published reports of each one of the following committees have been carefully read and individual recommendations noted. We recommend the adoption of the report of each committee as published.

Committee on Cancer.
Committee on Conservation of Vision.
Committee on Hard of Hearing.
Committee on Heart Disease.
Committee on Industrial Health.
Committee on Infantile Paralysis.
Committee on Mental Health.
Committee on School Health and Physical Education.
Committee on Traffic Safety.
Tuberculosis Committee.
Committee on Venereal Disease.

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associated with postoperative inactivity, restricted diets, pregnancy, as well as in simple constipation—Metamucil gently initiates reflex peristalsis and movement of the intestinal contents.

The "smoothage" therapy of Metamucil enables the colon to clear itself without irritating the mucosa.

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ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

SEARLE

RESEARCH IN THE SERVICE OF MEDICINE

G. D. SEARLE & CO., CHICAGO 80, ILLINOIS

We should like to commend especially to this House of Delegates the vast amount of work that has been accomplished by the following committees: (1) Cancer; (2) Heart Disease; (3) Industrial Health; (4) Tuberculosis, and (5) Committee on School Health and Physical Education. It has been brought to the attention of this reference committee by officers of the state medical association that one of the outstanding pieces of work in furthering proper public relations between the medical profession and influential and responsible lay groups was accomplished by the conference of school administrators and other members of the educational profession with interested physicians which was held in Indianapolis on September 29, 1948.

In regard to the resolution presented by the Indiana members of the American Diabetes Association, Inc., concerning diabetes week, to be held December 6-12, 1948, your committee wishes to report favorable and full approval of the suggestions embodied in the context of this resolution.

Mr. President, I move you the adoption of each of these reports singly and of the group as a whole.

Harry P. Ross, M.D., *Chairman*
Herman T. Combs, M.D.
Gordon A. Thomas, M.D.
John Paris, M.D.
Elton R. Clarke, M.D.

(Dr. Ross's motion for adoption of this report was seconded by Dr. Daniels, and passed.)

Amendments To Constitution and By-Laws

House of Delegates,
Indiana State Medical Association.

Gentlemen:

Your Committee on Amendments to the Constitution and By-Laws had three matters referred to it which will be covered in this report. They are as follows:

1. A resolution submitted by the St. Joseph County Medical Society under which the age for eligibility to Honorary Membership be reduced from seventy-five years to seventy years.

2. The report of the Committee on Industrial and Civic Relationship, printed on page 50 of the Handbook, which recommended the discontinuance of that Committee and the replacing of it by a Committee under the name of Committee on Industrial Health.

3. The report of the Committee on Constitution and By-Laws, which has been printed in the Journal and in the Handbook beginning on page 70.

This Reference Committee, having had all these matters referred to it under consideration, now reports as follows:

1.

The Committee recommends that the resolution reducing the age for eligibility to membership as an Honorary Member from seventy-five years to seventy years, be not adopted.

Pursuant to that conclusion of the Reference Committee and by its authority, I move that this portion of the Reference Committee's report be acted upon separately and that this House of Delegates reject the resolution which would reduce the age from seventy-five to seventy years. (Motion seconded by Dr. C. J. Clark, and carried.)

2.

The Committee has concluded that the report of the Committee on Industrial and Civic Relationship be approved and that the substance thereof be incorporated in the new By-Laws, and by the authority of the Reference Committee I move that this report dealing with this subject be approved. (Motion seconded by Dr. Daniels, and carried.)

3.

This Reference Committee had an extended session which was attended by Dr. Barclay, who was the Chairman of the Committee on Constitution and By-Laws. The study by the Reference Committee of the report of the Committee on Constitution and By-Laws impressed the Reference Committee with the enormous amount of work necessary to prepare the report which has been referred to us and which, as you will note, covers pages 66 to 104 in your Handbook. The Reference Committee feels that the Association should acknowledge its gratitude to the Committee as well as to our attorney, Albert Stump, for doing the work necessary to present in this report the entire problem of the revision of the Constitution and By-Laws as well as its recommendations and conclusions regarding certain suggested changes in the Constitution and By-Laws.

The House of Delegates should be aware of the fact that the Constitution of the State Association was adopted originally in 1849, and that it has been amended from time to time as to various provisions. The last recodification of the Constitution and By-Laws occurred in 1937. That recodification was made as a compilation of the various amendments that had theretofore been adopted to the original Constitution. The codification did not consist of a revision to bring the Constitution down to date with respect to all the provisions therein contained. As a result of there being no unified effort to fit together the various amendments that were made to the Constitution, there are some inconsistencies in the language of the Constitution as it now stands following the 1937 recodification. Conditions have changed to some extent and as a result certain practices have become accepted which are not covered by the Constitution and By-Laws. In the revision submitted to this Reference Committee we have the work of the Committee on Constitution and By-Laws in bringing the Constitution and By-Laws up to date.

Since there were certain recommendations made in the 1947 meeting of the Association which the Committee on Constitution and By-Laws believes should not be included in the Constitution, their

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LUMBOSACRAL AILMENTS

An Orthopedic Surgeon* in writing on the treatment of lumbosacral disorders in his book Backache and Sciatic Neuritis states as follows: — "Every patient should be given prolonged conservative treatment before radical measures are considered. Non-operative treatment consists of recumbency in bed, the application of support (adhesive strapping and belts of various types) and physical therapeutic measures. When backache at the lumbosacral junction is uncontrollable by such measures, a fusion operation is recommended."

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*Philip Lewin, M. D., F.A.C.S.
Backache and Sciatic Neuritis,
Chapter XXXIX, Page 580
Published 1943 by Lea & Febiger, Philadelphia

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report, after the introductory statement, is contained in two parts. Your Reference Committee recommends that each of the two parts be considered separately, and upon that basis it submits its report upon the two parts:

PART I

Part I has to do with the changes that would be necessary to provide for:

1. Fixing two years in advance the time and place of holding annual conventions.

2. The inclusion of a Vice-President and Speaker of the House as officers of the Association.

3. In addition to these changes in the Constitution, also the changes necessary to make the By-Laws conform to the changes in the Constitution.

This Part I is included in the report because of the fact that the duty was laid upon the Committee on Constitution and By-Laws to provide the machinery by which the above provisions could be made operative and effective as a part of the Constitution. The Committee on Constitution and By-Laws has performed its duty in that regard but has reached the conclusion that no Vice-President or Speaker of the House should be provided for. As to fixing the time and place of conventions two years in advance, the Committee on Constitution and By-Laws has incorporated that idea in the second part.

Therefore, upon the authority of the Reference Committee, I move that the recommendations of the Committee on Constitution and By-Laws regarding Part I of its report be adopted, and that accordingly the suggestions for a Vice-President and Speaker of the House be rejected. (Motion seconded by Dr. A. C. Yoder. Discussed by Drs. C. V. Rozelle, Yoder, C. J. Clark, Minor Miller and William A. Karsell. On voting, the motion was carried.)

PART II

In Part II of the Report of the Committee on Constitution and By-Laws, printed on pages 70 to 104, is set forth the Constitution and By-Laws of the Indiana State Medical Association showing by the kind of print what constitutes the old Constitution and By-Laws, what parts of the old would be deleted, and what parts are proposed as amendments.

The Reference Committee has read and studied every provision contained in the Constitution and By-Laws, the recommendations for parts to be abolished from the old Constitution and By-Laws, and the parts proposed to be included in the new revision of the Constitution and By-Laws. The Committee has had the recommendations of various officers besides the Committee on Constitution and By-Laws who have also studied the whole question in detail. The Reference Committee has reached the conclusion that Part II should be adopted in the form presented by the Committee on Constitution and By-Laws except as to certain points which are covered in the motions I am about to make.

I move that Part II be amended as to Chapter V, Section 4, by striking out all of Section 4 as it appears on page 83 of the Handbook, and substituting in lieu thereof the following: "The terms of offices shall be for the calendar year following the date of election." (Motion for adoption of this section of report duly seconded, and carried.)

The Constitution cannot be amended at this time. It must go over to next year before it can finally be voted upon. The By-Laws could be amended at the convention this year. To do so, however, would not be feasible. The revision in the By-Laws was made to provide By-Laws that would be consistent with the revision of the Constitution.

Therefore, upon the authority of the Reference Committee, I move that final vote on the revision of the By-Laws contained in Part II be deferred until the next annual convention. (Motion duly seconded, and passed.)

The above amendments having been authorized, now upon the authority of the Reference Committee, I move that Part II of the report contained on pages 70 to 104 of the Handbook, be adopted and approved; that final vote on the revision of the Constitution and By-Laws be included in the order of business in the next annual convention; and that proper publication be made in the JOURNAL of Part II as required under the existing Constitution and By-Laws for the amendment of both Constitution and By-Laws. (Motion seconded by Dr. Daniels, and carried.)

Resolution on Alternate Councilor

The Reference Committee on Constitution and By-Laws feels that the motion as submitted is inadequate in the definition of the duties and purpose for such election of an alternate councilor.

Therefore we, the Committee on Constitution and By-Laws, submit the following changes:

That each councilor district be instructed to elect an alternate councilor whose term of office shall be the same as the councilor, namely three years. However, it is further suggested that the alternate councilor be elected in a year during which there is no councilor elected.

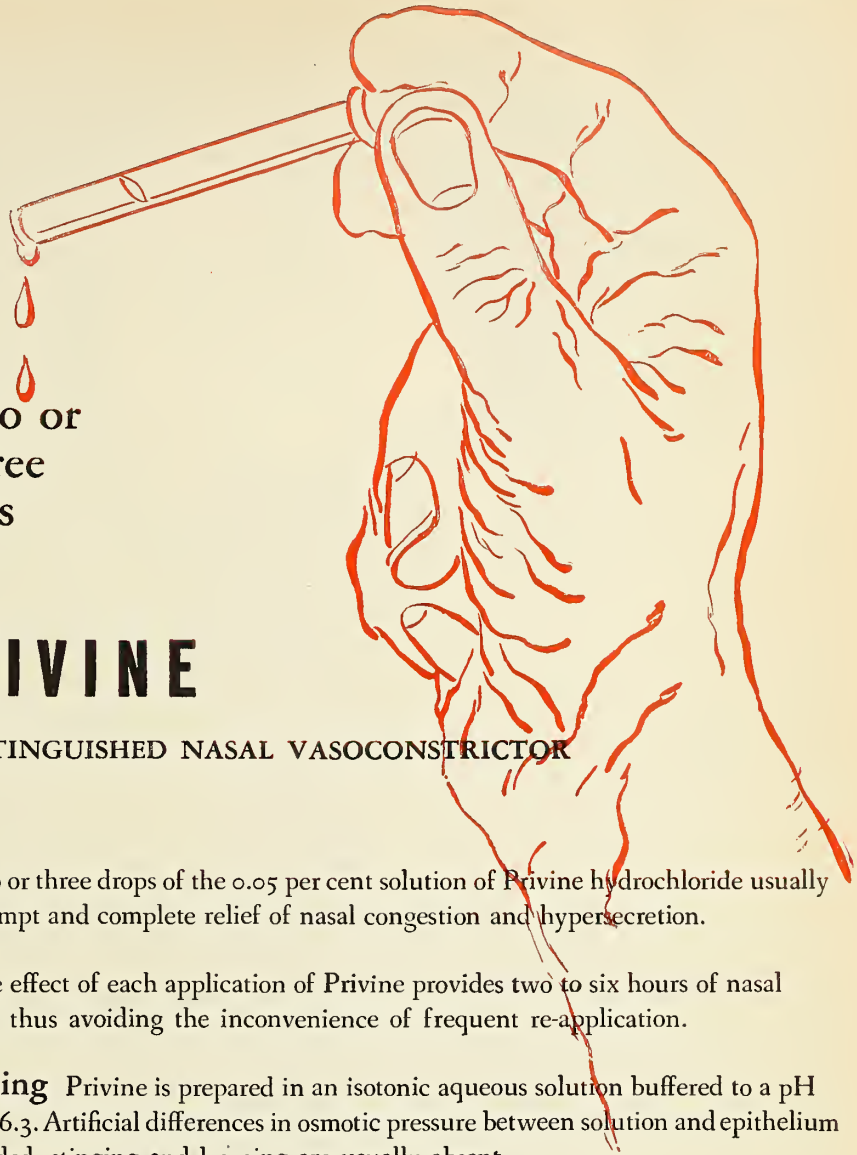
The duties of the alternate councilor shall be:

1. To represent the council district in the absence of the regularly elected councilor.

2. To vote only in the absence of the regularly elected councilor either in the House of Delegates or in council meetings where he represents the regularly elected councilor.

3. The alternate councilor shall not have the power of discussion if the regularly elected councilor is present, but he shall attend all meetings of the council, unless he has a reasonable excuse for not doing so.

I move that instead of this being a change in the By-Laws that it be included as a change in the Constitution and that such changes as the committee recommends be published in the Indiana



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State Medical Association Journal two times during the year.

The Reference Committee on Constitution and By-Laws recommends the acceptance of this resolution as rewritten, and I so move. (Motion seconded by Dr. Clark, and carried.)

Concluding Motion

I now move that the entire report of the Reference Committee be adopted as read. (Motion duly seconded, and passed.)

F. R. N. Carter, M.D., *Chairman*
J. E. Ferrell, M.D.
C. H. McCaskey, M.D.
E. O. Nay, M.D.
W. H. Howard, M.D.

Reports of Officers

House of Delegates,
Indiana State Medical Association

Gentlemen:

Your Reference Committee on Reports of Officers met and examined the addresses of the president and president-elect and reports of the following committees:

1. Report of Executive Secretary.
2. Report of Treasurer.
3. Report of Chairman of Council.
4. Reports of Councilors.
5. Report of Executive Committee.
6. Report of Editor of The Journal.
7. Report of Auditing Committee.

The president should be commended most highly for his untiring work throughout the entire year, and for his splendid address.

The committee also wishes to express its appreciation for the long hours of work and service given to organized medicine in Indiana by the president-elect. We regret, however, that certain statements made by our president-elect, which were made ostensibly for our membership, appeared in the public press. The committee believes any severe criticism of the profession for any of its alleged shortcomings should be discussed only in the profession and should not be given to the lay press where the meaning may and will be misconstrued.

The committee recommends that in the future all public addresses expressing policies of the Indiana State Medical Association should be passed upon by the Executive Committee or the Council before being submitted to the press.

This committee wishes to approve reports submitted by the following:

1. Report of Executive Secretary.
2. Report of Treasurer.
3. Report of Chairman of Council.
4. Reports of Councilors.
5. Report of Executive Committee.
6. Report of Editor of The Journal.
7. Report of Auditing Committee.

We wish to commend the officers and committees on the excellent work they have done during the past year.

I move the adoption of this report.

Virgil McCarty, M.D., *Chairman*
Herman M. Baker, M.D.
O. A. Province, M.D.
Robert M. Dearmin, M.D.
H. W. Eggers, M.D.

(Motion for adoption of this report as a whole seconded by Dr. W. H. Howard, and carried.)

Miscellaneous Business

House of Delegates,
Indiana State Medical Association

Gentlemen:

The members of this association are deeply indebted to the members of the Committee on Convention Arrangements for the fine entertainment that they have provided for us during this convention. We commend this committee for the excellent work it has done in handling the arrangements for this meeting.

We commend the work of the Committee on Indiana Inter-Professional Health Council, the Committee on Necrology, and the Committee on Secretaries' Conference and we recommend the adoption of these reports. I move the adoption of this portion of the report. (Motion duly seconded, and passed.)

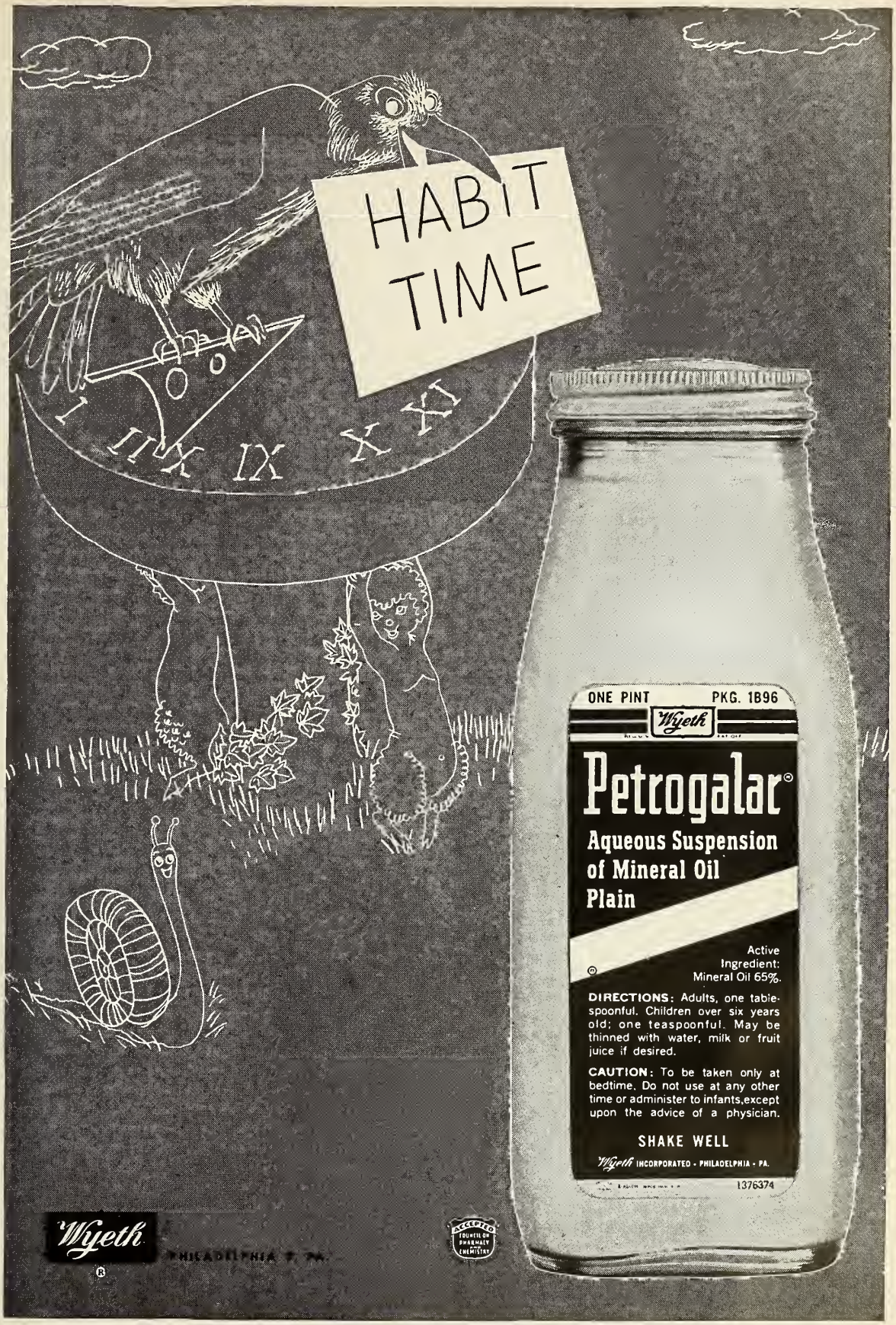
This committee recommends the adoption of the report of the Committee on Veterans Affairs and Rehabilitation as published in the Handbook on pages 134 and 135. (Motion for adoption seconded by Dr. Hall, and carried.) The supplementary report presented by Dr. Charles Thompson, chairman of the committee, is approved with the following recommended additions: (See pages 1291, 1292, minutes of first meeting of House of Delegates, for Dr. Thompson's supplementary report, which was read again at this time by Dr. Young.)

Section 3 to read as follows: "Physicians who did not serve as Medical Officers during World War II *and physicians with physical disabilities who could serve in base hospitals and with the Veterans Administration, thereby releasing some men for active duty.*"

Section 6 to read as follows: "Former medical officers in order according to period of active duty with Armed Forces *and their ages.*"

We recommend the adoption of this report with these additions. (Motion for adoption of this section duly seconded and passed.)

We move the acceptance of the physicians whose names have been certified for honorary membership and presented by their respective delegates to this House for honorary membership in the Indiana State Medical Association. (Motion seconded by Dr. Nay, and carried.)


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We approve the resolution in regard to the hospitalization of war veterans and recommend its adoption. (Motion for adoption seconded by Dr. Nay, and passed.)

GERALD S. YOUNG, M.D., *Chairman*
NORMAN S. LOOMIS, M.D.
WILLIAM H. GARNER, M.D.
ALBERT STOUDER, M.D.
FRANK A. BEARDSLEY, M.D.

(Motion for adoption of report as a whole carried.)

DR. SENSENICH: I regret that I didn't hear all of the report, and if I got the wrong impression, please pardon me. When it comes to prescribing who shall serve and the manner of their selection, especially in the age groups, you must have in mind the fact that you are presuming that you are going to have sufficient voluntary response to your recommendations, or you are going to favor the setting up of an enforced selective service. I was in Washington two days the past week on that matter. We have insisted over a period of time that there be a Civilian Medical Committee that would confer with the defense authorities, and that would of course take in all three of the services, with the idea of giving study to how many medical men are really needed.

The Air Force and the Navy are inclined to think they can take care of themselves. On the other hand, the Army is of the opinion that they must have some kind of draft. A draft of physicians would, of course, include ages above the present age of the draft. Those present ages, up to 26, will leave presumably about 9,000 doctors. From that age on up various suggestions have been made, and I am not giving you a secret when I say there are many men in Washington who are still insistent upon making a special draft applying only to physicians and dentists. That we have opposed. If it is necessary to have a draft of the older ages, and as you recall, the first draft measure went up to age 45, if it is necessary to have a draft, then the draft should go clear across the board. It should include engineers, those people with special training, perhaps transportation or industry, or whatnot, rather than to make the physicians and dentists subject to draft at any time the authorities might decide that is a desirable thing.

Secondly, it has been brought to their attention that there are a number of medical men occupied in the various training programs and loaned to the Veterans Administration. In addition to that, there are quite a number of medical men who are engaged in conducting hospitals, in which the hospital facilities are largely taken up with the care of men in the service and employees of the government, who are not medical men or women, and who are not necessarily the responsibility of the government.

As you probably know, an additional complicating factor in the VA has been that these facilities are now being used for the training of medical men, in other words, to provide the residencies for the young medical men, and you have a rather vicious circle to this extent, that veterans who are not to care for non-service-connected disabilities are invited and sought as patients to provide care for the training of residents.

I think that all of us who have had to do with this throughout the years are entirely in sympathy with the idea of the armed forces making the medical service in the armed forces attractive. It probably is proper that they should give training, but there should be some reasonable measures taken in the services to make them attractive enough to be a career, rather than be faced with the possibility that a number of students who now are receiving residencies at a time when residencies are not easy to get, may at the conclusion of their responsibility to the government, decide again to leave the service.

If we are going to have peacetime armies, we were of the opinion that the medical profession, especially a man up above 26, maybe 30 or 35 years of age, settled in a community, carving out a career for himself, might object to being drafted into the service in order to replace a medical man now engaged in a training course in some one of the hospitals that are being conducted.

So we have insisted that this Civilian Committee be appointed to explore the actual needs of the armed services, how many are needed for the care of these youngsters who are being drafted into the Army, how many are required in training services that are not going beyond their normal field, and how many of the men in the various units are engaged in the care of dependents or employees of the government, for whom the government is not necessarily responsible. That is in the process of consideration. We have not agreed. Certainly we would not permit the profession to accept a draft on the basis of the present field.

We are told—and I don't feel unkindly toward the Surgeon Generals of the services—but we are confronted with the fact that at the present time they have about 7.7 men per thousand. The answer is that we no longer allocate these men on the basis of the number of men per thousand, but the number of men to replace those now required in existing units. To that of course we do insist that the units be given some consideration and evaluation before we can consider that that many medical men are necessary.

This is only for information. Obviously this program couldn't be put into effect, taking the older ages without legislation, and we have felt that the medical profession did not wish draft legislation. There is a definite program of priorities that have been set up, which seemed to be reasonable, as to those men who were given

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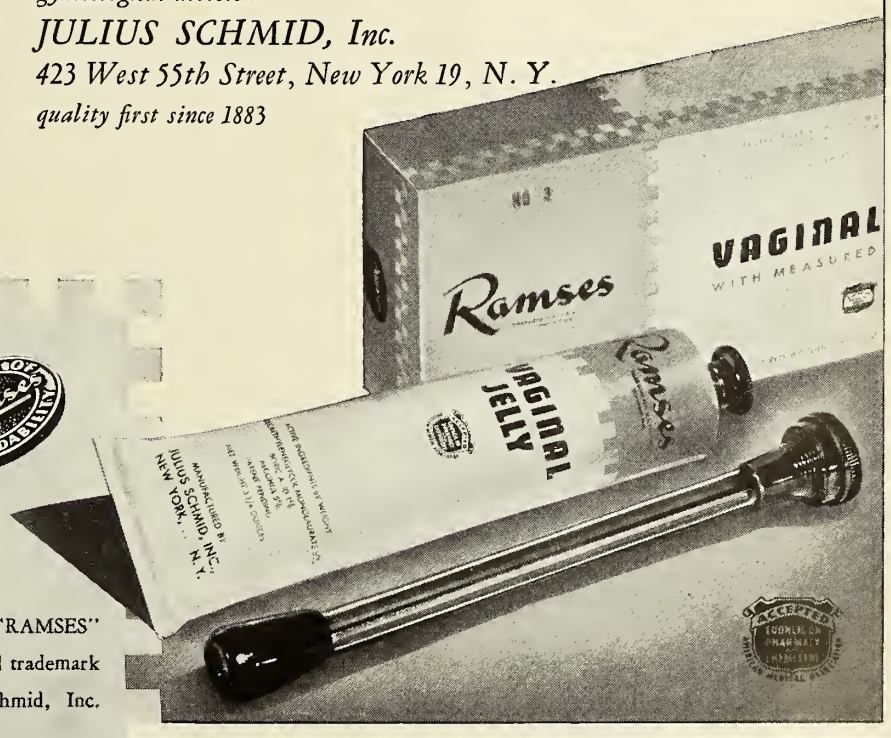
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education at government expense, or given deferred status in order that they might continue education. How many there are in that number I couldn't tell you offhand, and I am not at liberty to tell you what the total of the armed forces is, and I couldn't say as to how many medical men are needed. If you wish to express yourselves, and this is perfectly all right to have set before the House what you have in mind, recognizing however that this will probably come before the session in St. Louis, and we must of necessity oppose an enforced service, and I hope certainly that this can be prevented.

DR. J. ROBERT DOTY: At the meeting of the Legislative Committee last night it was brought out that the House of Delegates last year asked the Legislative Committee to present at the 1949 session of the legislature a bill making it illegal for anyone to apply to himself the title of "Doctor" unless a doctor's degree had been conferred upon him by a recognized educational institution, and also making it illegal for anyone to use the title "Doctor" without using the proper suffix designating what kind of doctorate he holds. We feel that this matter is of so little significance, in view of other anticipated legislation, that I move that it be left to the discretion of the Legislative Committee as to the advisability of presenting the proposed bill pertaining to the use of the prefix "Doctor" at the 1949 session of the Indiana State Legislature. (Motion seconded by Dr. Cavins, and passed.)

DR. FLOYD T. ROMBERGER presented the following resolutions:

(1) WHEREAS our very good friend and most highly respected colleague, Dr. E. M. Shanklin, now has been elected to the position of Editor Emeritus, for life, of our JOURNAL of the Indiana State Medical Asociation, and

WHEREAS, his service to this Association and to its House of Delegates has extended to and embraced every organization activity from the very lowest committee assignment and its chairmanship to the very highest honors which could be bestowed upon him; to mention only an outstanding few: Councilor of the Tenth District 1918 through 1924 and its chairman 1921 through 1924; again Councilor of the Tenth District 1929 through 1934; and President of this great Association in 1925; and

WHEREAS, under his wise and sagacious direction during the sixteen years of his editorship of our JOURNAL it advanced to become second to none in this broad land, a journal of which every member of our Association justly may be proud,

Therefore be it resolved, that this House of Delegates, at this time and in convention assembled, extends to Dr. Shanklin its most sincere appreciation, its hearty congratulations, and its most happy felicitations upon his many, many years of faithful service, and

Be it Further Resolved, that these resolutions shall become a permanent record of the transactions of this House of Delegates, that a copy signed by the President be sent to Dr. Shanklin, that copies be furnished the press, and that the executive secretary be authorized by this House of Delegates to telegraph to Dr. Shanklin the sentiments herein expressed on behalf of this, our great Association.

(Motion for adoption seconded unanimously.)

(2) *Be it Resolved,* that this House of Delegates, in convention assembled, hereby and herewith extends to the Indianapolis Press and Radio, to the Indianapolis Medical Society, and to the Woman's Auxiliary, both at the local and state levels, our sincere appreciation and happy felicitations for their outstanding efforts in helping to make this 1948 annual convention of the Indiana State Medical Association so complete a success.

(Motion for adoption seconded unanimously.)

THE PRESIDENT: I want to thank again all the officers, members of the House of Delegates, committees, the hardworking executive secretary, and our attorney, and all of you for aiding to make this convention the success it has been. I want to thank you for your indulgence in getting this work done. It has been a pleasure to serve you this year.

I also want to thank Dr. Hauss, who has ably assisted me, and I know he will make a good president for you next year.

No further business appearing, on motion of Drs. Catlett and Garber, the House of Delegates adjourned, to meet again on Sunday, November 21, 1948, in Indianapolis.

EXECUTIVE COMMITTEE

October 25, 1948

Roll call showed the following present: C. H. McCaskey, M.D., chairman; Walter L. Portteus, M.D.; Cleon A. Nafe, M.D.; A. P. Hauss, M.D.; Alfred Ellison, M.D.

A. F. Weyerbacher, M.D., treasurer; Frank B. Ramsey, M.D., associate editor of THE JOURNAL; Albert Stump, attorney, and Ray E. Smith, executive secretary.

Membership Report

Number of members October 25, 1948	3,656*
Number of members October 25, 1947	3,587
Gain over last year	69
Number of members December 31, 1947	3,618

* Includes 55 in military service
179 honorary members

Treasurer's Office

Medical defense fund. The treasurer made a report on the medical defense fund receipts and expenditures for the past ten years and recommended that the By-Laws be amended to take $1.50 from each member's dues instead of $.75 for deposit in this fund. Motion was made by Drs. Nafe and Portteus that the report be referred to the Council with the recommendation that the Council recommend that the By-Laws be changed to set aside $1.25 from each membership for the medical defense fund.

Pension trust plan. On motion of Drs. Ellison and Portteus, the pension trust plan for employees of THE JOURNAL and headquarters office was tabled.

Fifth Chicago Medical Society Annual Clinical Conference

MARCH 1, 2, 3, 4, 1949

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A scientific program planned to bring information concerning newer developments in all fields of medicine and presented by a group of outstanding speakers.

A wide range of scientific exhibits which promise to be of special interest.

Time given for viewing the well displayed technical exhibits.

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1949 Annual Session, Indianapolis, September 26-29, 1949

The executive secretary reported that the dates set for the 1949 Indiana meeting conflict with those of the Pennsylvania State Medical Society. It was taken by common consent that since the Pennsylvania Society is unable to change its dates that the Indiana State Medical Association dates remain as previously set.

The president-elect reported on the centennial celebration of the Pennsylvania State Medical Society in Philadelphia October 3-7.

Statements of receipts and expenditures for September for the association and THE JOURNAL were approved.

Legislative Matters

On motion of Drs. Nafe and Ellison, the recommendation of the Committee on Public Policy and Legislation that a folding machine be purchased was approved.

Organization Matters

Membership in Indiana State Chamber of Commerce. On motion of Drs. Hauss and Nafe, membership in the Indiana State Chamber of Commerce for 1948-1949 was approved.

The chairman of the Executive Committee was authorized to name someone to attend the fall meeting of the Board of Directors of the Indiana State Chamber of Commerce at French Lick, November 5-7, on motion of Drs. Hauss and Portteus.

Delegates to the Indiana State Conference on Social Work. The executive secretary was directed to attend this meeting as a representative of the association.

Conference on establishment of Veterinary College at Purdue University. The committee went on record by common consent that the medical profession should support the establishment of a School of Veterinary Science and Medicine at Purdue University and directed the executive secretary to attend the conference on October 30 at Lafayette at which this matter was to be discussed.

Conference with I. U. officials. The president gave a report on a conference with President Wells of Indiana University and Dean VanNuys of the Indiana University School of Medicine regarding the plan to be followed in permitting full-time clinicians to accept private patients.

The attorney reported on the decision of the Indiana Appellate Court on the appeal of Dr. D. Lee Andrews' case, which reversed the decision of the Hamilton Circuit Court.

The Journal

Report on advertising:

Increase in October	$ 304.30
Decrease	264.94
Total increase, October	$ 39.36
Total increase for year	$2,533.80

Request of Francis Roberts Agency for complimentary subscription was denied by common consent.

There being no further business, the committee adjourned to meet again on Sunday, December 12, 1948, at the Columbia Club.

COMMITTEE ON PUBLICITY

October 1, 1948

Present: Homer G. Hamer, M.D., chairman; Marlow W. Manion, M.D.; James O. Ritchey, M.D.; Cleon A. Nafe, M.D., president of the Indiana State Medical Association, and Ray E. Smith, executive secretary.

The following "Hints on Health" columns were approved:

Week of November 8, 1948—"Rheumatic Diseases."

Week of November 15, 1948—"Thumb-Sucking."

Week of November 22, 1948—"Bad Breath."

Six news releases in connection with the ninety-ninth annual session in Indianapolis, October 26-28, 1948, as follows, were approved:

"Medical Association Will Select 'Family Doctor of the Year.'"

"Specialty Groups Will Meet During Medical Convention."

"Doctors Will Mix Work and Play at State Convention."

"Doctors Practicing Medicine 50 Years Will Receive Pins."

"1949 President of A.M.A. Will Address Medics."

"2,000 Physicians Are Expected at Medical Meeting."

The question of issuing a news release in connection with a national "Diabetes Detection Drive" the week of December 6-12, 1948, was discussed. The secretary was directed to ask Dr. Franklin B. Peck for information on what is planned in Indiana, and to obtain his suggestions upon what would be appropriate to give the press.

COMMITTEE ON PUBLICITY

October 15, 1948

Present: Homer G. Hamer, M.D., chairman; James O. Ritchey, M.D.; Cleon A. Nafe, M.D., president of the Indiana State Medical Association, and Ray E. Smith, executive secretary.

The following "Hints on Health" releases were approved:

Week of November 29, 1948—"Hazards in the Home."

Week of December 6, 1948—"Biting the Nails."

Week of December 13, 1948—"Winter Clothing."

An article entitled, "Diabetes Week Will Be Observed in December," from the American Diabetes Association was approved for use in the November issue of THE JOURNAL *of the Indiana State Medical Association.*

"Youth Without Its Levity and Age Without Decay"
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COUNCILOR DISTRICT MEETING

TENTH DISTRICT

Dr. Paul C. F. Vietzke was elected president and Dr. Carl M. Davis was elected secretary, respectively, of the Tenth District Medical Society at the Fall meeting held in Whiting, October 14. Both doctors practice in Valparasio.

The next meeting will be held Wednesday, March 16, 1949, at Phil Smidt's restaurant in Whiting. The speaker at the dinner will be Dr. A. C. Ivy of Chicago.

Seventy-five physicians and their wives were entertained at luncheon by the Standard Oil Company and were taken on a tour of the refinery and laboratory at Whiting.

Dr. Neal Davis of Lowell presided at the district society meeting. In addition to electing officers, the society voted annual district dues of 50 cents a year, to be collected by the secretaries of the component county societies, to finance the district meetings. Ray E. Smith, executive secretary of the Indiana State Medical Association, explained that other district societies employed this method to raise funds for expenses.

Dr. Archibald Hoyne, director of Chicago's Contagious Diseases Hospital, presented an interesting paper on "Poliomyelitis."

LOCAL SOCIETY REPORTS

Boone County Medical Society members met at the Witham Hospital in Lebanon on October 5, when they had as their guests the members of the Hendricks County Medical Society. The twenty-seven members and guests present heard Dr. G. W. Gustafson, of Indianapolis, discuss "The Management of Occiput Posterior Position."

Clinton County Medical Society members held a meeting on October 5 at the Clinton County Hospital, in Frankfort. Seventeen members were present to hear Mr. R. S. Saylor, executive secretary of Mutual Medical Insurance, Inc., discuss problems of the company; and Dr. Frank W. Peyton, of LaFayette, who discussed "Varicosities of Pregnancy."

At another meeting, on November 2, twelve members were in attendance. This was a dinner and social meeting.

Fayette-Franklin County Medical Society members held a dinner meeting at the Connersville Country Club on October 12. Election of officers was held.

Fort Wayne (Allen County) Medical Society members met at the Chamber of Commerce Building, in Fort Wayne, on October 19. This was a business meeting, and forty members were present.

Greene County Medical Society members held a meeting at the Freeman Greene County Hospital in Linton, on October 14. Dr. William Craft, of Linton, spoke on "Our By-Laws." Eighteen members were present.

Hamilton County Medical Society members met at Sheridan, on October 12. The nineteen members present heard Dr. Paul Merrell, of Indianapolis, discuss "The Management of Acute Head Injuries."

Kosciusko County Medical Society members met in Warsaw on October 5, when Dr. G. T. Bowers, of Fort Wayne, was the guest speaker. His subject was "Female Sex Hormone Therapy." Ten members were present.

Montgomery County Medical Society members met at Culver Hospital, in Crawfordsville, on October 21. Dr. James M. McFadden, of LaFayette, addressed the thirty-one members present on the subject of "Agranulocytosis."

St. Joseph County Medical Society members held a meeting on September 29 at the Hotel LaSalle in South Bend. Guest speakers were Dr. J. Peerman Nesselrod, associate in surgery, and Dr. Jay Garner, associate in medicine, both of Northwestern University. Their subject was "Various Lesions of the Lower Bowel and Anal Infections." One hundred twenty-five members and guests were present.

Tippecanoe County Medical Society members met at Lincoln Lodge in LaFayette, on October 12. Fifty-five members were present. Guest speaker was Dr. Willis D. Gatch, of Indianapolis, whose subject was "Observations on Cause and Treatment of Varicose Veins and Ulcers."

Vanderburgh County Medical Society members held a meeting on October 12 at the Hotel McCurdy, in Evansville. Sixty members were present. The speaker of the evening was Dr. W. A. Browne, who is the new city-county health officer for Evansville and Vanderburgh County.

At another meeting, on November 9, Dr. Harris B. Schumacker, Jr., professor and chairman of the Department of Surgery of the Indiana University School of Medicine, was the guest speaker. Ninety-two members attended this meeting.

Wabash County Medical Society members held a meeting at the Sheller Hotel, in North Manchester, on October 20. Fifteen members were present, and heard Dr. Fred Perry, of Fort Wayne, speak on "Contact Dermatitis."

Wells County Medical Society members met on October 18 at the Caylor-Nickel Clinic, in Buffton. Thirteen members were present.

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OUR GOAL

"Every Physician's Wife An Auxiliary Member"

REPORT OF THE PRESIDENT OF THE WOMAN'S AUXILIARY TO THE I.S.M.A.

Once again we are come to that season of the year when we celebrate the birth of the Prince of Peace. May I wish for all the members of the Auxiliary and their families the joys and peace of Christmas? How fitting that the World Medical Association, made up of 29 countries at this writing, should incorporate in it's statement of objects and aims the purpose of promoting health and peace among the peoples of the world. Christianity, with its principle of the worth of the individual, is moving forward by means of the ministry of healing. The result is peace and good will.

How we are being assailed by subversive forces, threatening to destroy our liberties and the free practice of medicine, was brought out most convincingly by Mr. Arthur Conrad, Assistant Administrator, National Physicians Committee for the Extension of Medical Care, who addressed the Conference of State Auxiliary Presidents and Presidents-elect held in Chicago on November 4 and 5.

We were amazed to learn how the communists are working in various altruistic women's organizations, endeavoring to put the idea of socialized medicine across; how the names of some organizations have been changed after their activities have been exposed; how they have infiltrated such ideas into even arithmetic and other textbooks used in the public schools.

Really, the feeling of those present was one of alarm and seriousness, and we were warned we must be informed, as auxiliary members, in order to help in this fight. It was suggested that we study carefully the Brooking's Report, which I hope will soon be in the hands of every auxiliary.

We heard many other worth-while addresses while attending the conference. Mr. Thomas Hendricks was one of the speakers, including some amusing remarks about Indiana in his talk. It was an inspiration to meet these fine women from all over the United States and Hawaii. The president of the Hawaiian Auxiliary presented each of us with an orchid from her Territory.

On the state level, as your president I have visited twelve of the auxiliaries and have helped organize Rush and Benton Counties since September. At least two other counties will soon be organized.

It was a great satisfaction to have so many of the auxiliary members attend the functions for the ladies in connection with the convention of the I.S.M.A. Our board meeting on Wednesday morning was a great success, with more than fifty in attendance. We heard a very helpful talk by Dr. S. P. Clarke on nurse recruitment. I have learned that many auxiliaries are cooperating in a big way along this line.

Our thanks are due Mrs. Bert E. Ellis, Mrs. Frank Gastineau, and many others of the Indianapolis Auxiliary for the beautiful tea at the Governor's Mansion, with Mrs. Ralph E. Gates as hostess; also for the lovely luncheon-bridge party at the Athletic Club. We were happy to have as guests the president and president-elect of the Woman's Auxiliary to the Michigan State Medical Society, Mrs. Willis Dixon and Mrs. Donald Wright. We were greatly honored and inspired to have as our guest speaker at the luncheon Mrs. Luther H. Kice, of Garden City, New York, who is president of the Women's Auxiliary to the American Medical Association. Mrs. Kice and your president were privileged to sit at the speaker's table at the banquet on Thursday evening for the Hoosier doctors and their wives.

We feel sure that every auxiliary member who attended the convention brought home with her much of pleasure and profit.

Mrs. W. R. Morrison, *President*

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INDEX TO VOLUME 41

January to December, Inclusive, 1948

January	—Pages 1 to 184	July	—Pages 677 to 780
February	—Pages 185 to 276	August	—Pages 781 to 884
March	—Pages 277 to 376	September	—Pages 885 to 992
April	—Pages 377 to 468	October	—Pages 993 to 1140
May	—Pages 469 to 572	November	—Pages 1141 to 1228
June	—Pages 573 to 676	December	—Pages 1229 to 1332

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

Index to Volume 41, January-December, 1948

ORIGINAL ARTICLES

Abdominal Pregnancy with Report of Two Cases (Hagie) ---- 305
Abdominal Surgery, Anesthesia in (Tuohy) ---- 398
Abdominal Trauma: Report of Five Cases, Rupture of the Jejunum and Ileum Due to Non-Penetrating (Powell, Battersby, Bauer) ---- 1256
Adenitis of the Distal Ileum and Appendicitis, Mesenteric (Sicks) ---- 807
Adoption, Regarding the Laws of ---- 44
American Medical Association, Officers of the ---- 47
Anesthesia in Abdominal Surgery (Tuohy) ---- 398
Anesthesia for Chest Surgery (Flanigan, Moore) 913
Anesthesia for Patients with Disease of the Cardiovascular System (Adams) ---- 703
Appendicitis, Mesenteric Adenitis of the Distal Ileum and (Sicks) ---- 807
Asphyxia by Firemen, The Treatment of (Spurgeon) ---- 307
Bal, A Case of Arsenic Encephalopathy Successfully Treated with (Masters) ---- 1254
Bone Defects by Bone Grafts, Treatment of Long (Scuderi) ---- 400
Bronchial Obstruction, Nontuberculous Pulmonary Diseases: Their Relation to (Holinger) ---- 301
Brucellosis. A Resumé of Present Concepts (with special reference to the chronic illness) (Harris) ---- 603
Brucellosis, Recent Developments in the Treatment of (Urschel) ---- 695
Burns, General Treatment in the More Severe Type of (Cole) ---- 812
Business Part of the Practice of Medicine, The ---- 39
Carcinoma of the Thyroid Gland, Surgical Aspects of (Ramsey) ---- 395
Cardiovascular System, Anesthesia for Patients with Disease of the (Adams) ---- 703
Casualty and Fire Insurance, Malpractice ---- 31
Cellulitis, Periorbital: A Report of Four Cases (Hickman) ---- 501
Central Nervous System Syphilis, A Second Report on Intrathecal Penicillin in (Thrasher, Gosman, Bowman) ---- 216
Cerebral Palsy (Martz) ---- 211
Chest, Industrial Diseases of the (Hamlin) ---- 1013
Chest Surgery, Anesthesia for (Flanigan, Moore) 913
Children, Virus Diseases in (Kaiser) ---- 1250
Colic in Infancy (Miller) ---- 799
Congress, Indiana Delegation in ---- 46
Constitution and By-Laws of the Indiana State Medical Association ---- 63
Diabetes Mellitus, Vascular Changes of the Eye Associated with (McFarland) ---- 487
Diabetic Coma at Indianapolis General Hospital, The Treatment of (Peck) ---- 595
Encephalopathy Successfully Treated with Bal, A Case of Arsenic (Masters) ---- 1254
Erythroblastosis Fetalis, Exchange Transfusion for (Cavins) ---- 214
Estate Plans, The Effect of Taxes on Your (Emswiller, Stump) ---- 21
Ethics of the American Medical Association, Principles of Medical ---- 59
Eye Associated with Diabetes Mellitus, Vascular Changes of the (McFarland) ---- 487
Femur, Fracture of the Shaft of the (Mumford) 599
Fire Insurance, Malpractice, Casualty and ---- 31
Fractures, Novocain Injection Treatment of Metatarsal (Otten, Mumford) ---- 1169
Fracture of the Shaft of the Femur (Mumford) ---- 599
Gallbladder, Surgical Conditions of the (Catlett) 913
Gastric Malignancy, Clinical Aspects of (Gates) ---- 1166
Goiter, The Management and Treatment of (Link) ---- 814
Group Practice of Medicine ---- 39
Headache (Mahoney) ---- 496
Hemangioma, The Treatment of (Katterjohn) ---- 903
Home Town Medical Care Program of the Veterans' Administration (Thompson) ---- 35
Hospitals, Regulation Licensing of ---- 44
Hospitals and Sanitariums in Indiana, Approved ---- 48
Ileum and Appendicitis, Mesenteric Adenitis of the Distal (Sicks) ---- 807
Immunization — The Doctor's Responsibility (Jackson) ---- 402
Industrial Diseases of the Chest (Hamlin) ---- 1013
Infancy, Colic in (Miller) ---- 799
Infantile Paralysis During the Acute Stage, Treatment of (Lewin) ---- 908
Influenzal Vaccines, The Current Status of (Coggeshall) ---- 203
Institutions Operated by the State of Indiana ---- 47
Insurance, Malpractice, Casualty and Fire ---- 31
Investments and Protection ---- 40
Licensing of Hospitals, Regulation ---- 44
Malignancy, Clinical Aspects of Gastric (Gates) ---- 1166
Malpractice, Casualty and Fire Insurance ---- 31
Malpractice and Malpractice Suits ---- 42
Medical Management of Thyrotoxicosis, The (Middleton) ---- 295
Medical Organizations, State-Wide Special ---- 55
Metals, Toxicology of the Heavy (Fairhall) ---- 917
Metatarsal Fractures, Novocain Injection Treatment of (Otten, Mumford) ---- 1169
Mononucleosis—A Review of the Disease, Infectious (Dalton) ---- 1021
Nontuberculous Pulmonary Diseases: Their Relation to Bronchial Obstruction (Holinger) ---- 301
Novocain Injection Treatment of Metatarsal Fractures (Otten, Mumford) ---- 1169
Nutrition in Etiology and Treatment, Styes: The Role of (Cockrum, Slaughter, Lynch, Austin) ---- 489
Nurses Association, Counseling and Placement Service of Indiana State ---- 34
Nursing Homes, Indiana's Licensed (Walls) ---- 25
Nursing in Indiana, Accredited Professional Schools of ---- 56
Observation (Keller) ---- 1247
Officers of State-Wide Organizations ---- 57
Penicillin in Central Nervous System Syphilis, A Second Report on Intrathecal (Thrasher, Gosman, Bowman) ---- 216
Periorbital Cellulitis: A Report of Four Cases (Hickman) ---- 501
Pharmacology and Therapeutics, Recent Advances in (Solomon, Blatt, Browning, Dugan, Fouts, Hare, Kohlstaedt, Peirce, Westmoreland) ---- 799
Practice of Medicine, The Business Part of the ---- 39
Pregnancy with Report of Two Cases, Abdominal (Hagie) ---- 305
Pregnancy, Toxemia of (Bryant) ---- 1018
President's Address (Nafe) ---- 1161
Proctology, Ambulatory (Fitzsimmons) ---- 707
Pulmonary Diseases: Their Relation to Bronchial Obstruction, Nontuberculous (Holinger) ---- 301
Reciprocity Between States Regarding Admission to Practice ---- 42
Refraction, The Cross Cylinder in (Cuthbert) ---- 491
Registration and Examination, Laws Pertaining to the State Board of Medical ---- 43
Rehabilitation, Indiana Vocational (Hall) ---- 32
Rehabilitation Service in the Veterans' Administration, The Medical (Covalt) ---- 716
Retina: Newer Treatment, Hemorrhages of the (Rutherford) ---- 494

Rocky Mountain Spotted Fever in Indiana; Recent Advances in Therapy (Muntz, Salkin) 591
Rupture of the Jejunum and Ileum Due to Nonpenetrating Abdominal Trauma: Report of Five Cases (Powell, Battersby, Bauer) 1256
Sanitariums in Indiana, Approved Hospitals and 48
Schools of Nursing in Indiana, Accredited Professional 56
State of Indiana Boards, Roster of 50
State-Wide Special Medical Organizations 55
Streptomycin in the Treatment of Tularemia (Foshay) 207
Syphilis, A Second Report on Intrathecal Penicillin in Central Nervous System (Thrasher, Gosman, Bowman) 216
Syphilis, Tests for 45
Syphilis, What is the Best Treatment for Early (Buchholz) 1170
Tax and the Medical Profession, Federal Income (Wilcox) 36
Taxes and Your Estate Plans, The Effect of (Emswiller, Stump) 21
Therapeutics, Recent Advances in Pharmacology and (Solomon, Blatt, Browning, Dugan, Fouts, Hare, Kohlstaedt, Peirce, Westmoreland) 799
Thyroid Gland, Surgical Aspects of Carcinoma of the (Ramsey) 395
Thyrotoxicosis, The Medical Management of (Middleton) 295
Tonsillectomy—Pro and Con (Gaddy) 914
Toxicology of the Heavy Metals (Fairhall) 917
Transfusion for Erythroblastosis Fetalis, Exchange (Cavins) 214
Tularemia, Streptomycin in the Treatment of (Foshay) 207
Vaccines, The Current Status of Influenzal (Coggeshall) 203
(Vagatomy) in the Treatment of Acute Perforated Duodenal Ulcer, Vagus Nerve Resection (Straus) 700
Veterans' Administration, Home Town Medical Care Program of the (Thompson) 35
Veterans Administration, The Medical Rehabilitation Service in the (Covalt) 716
Virus Diseases in Children (Kaiser) 1250
Vocational Rehabilitation, Indiana (Hall) 32
Year Book and the 1947 Year Book, This 46

EDITORIALS

A.M.A. Interim Meeting 1172
Anniversaries 1027
Another "Old Timer" 73
Brayton Foundation, The Alembert W. 219
Buxton, Eva Joanna 1173
Coroner, The County 1174
Cost of Medical Care, The 720
County Medical Society, A Boost for the 615
"Doctors Scarce" 819
Editorial Notes 74, 220, 311, 410, 508, 617, 722, 819, 924, 1028 and 1264
Election, The November 818
Ewing, Mr. 1173
"Fifty Year Club" 1264
Forster Leaving Indiana, Doctor 218
Freshman Class, The 922
General Practice, Residency Training for 616
Hand, The 409
Health Workshop, The 721
Heart Foundation, Indiana 1027
Hoosier Highways 507
Indiana Heart Foundation 1027
Journal Costs 219
Kaadt Comment, More 722
Kaadts, Again the 310
"Kickback," A Bit More Re the 410
"Kickbacks" 310
Letter to a Medical Student from His Physician Father 614
Lilly, Josiah Kirby 409
McCulloch "Retires," Dr. 506
MD 1-Indiana 309
M.D.—1948 923
Medical Care, The Cost of 720
Medical Preparedness 505
"Monon," The Return of the 506
Myopia, Some Observations on 923
1948 71
Ninety-ninth Annual Meeting, The 1263
Nursing Situations of Today, The 74
Oak, David D., M.D. 1262
Planned Parenthood 74
President, Our 1026
Rabies Situation, The 617
Recommendations, Those 72
Residency Training for General Practice 616
Rural Practitioner Needs Clinical Laboratory 816
Shades," "The 219
Social Hygiene Day, February 4, 1948 72
"Suffereth Long" 818
Surgeon General, A New 408
This Should Be Final! 616
Time for Action 721
Year Book—1948 Edition, The 71

AUTHORS

Adams, William B., Muncie (Anesthesia for Patients with Disease of the Cardiovascular System) 703
Austin, E. W.; Cockrum, William M.; Slaughter, Howard C.; Lynch, Harold D., Evansville (Styes: The Role of Nutrition in Etiology and Treatment) 489
Battersby, J. S., Indianapolis; Bauer, Thomas B., Indianapolis; Powell, J. P., Marion (Rupture of the Jejunum and Ileum Due to Nonpenetrating Abdominal Trauma: Report of Five Cases) 1256
Bauer, Thomas B., Indianapolis; Powell, J. P., Marion; Battersby, J. S., Indianapolis (Rupture of the Jejunum and Ileum Due to Nonpenetrating Abdominal Trauma: Report of Five Cases) 1256
Berman, J. K., Indianapolis (The Scientific Organization of the Hospital) 821
Blatt, A. Ebner; Solomon, R. A.; Browning, James S.; Dugan, William M.; Fouts, Paul J.; Hare, Laura; Kohlstaedt, Kenneth G.; Peirce, James D.; Westmoreland, Robert E., Indianapolis (Recent Advances in Pharmacology and Therapeutics) 799
Bowman, George W.; Thrasher, John B.; Gosman, James, Indianapolis (A Second Report on Intrathecal Penicillin in Central Nervous System Syphilis) 216
Brother, George M., Indianapolis (Prophylaxis against Ophthalmia Neonatorum) 510
Browning, James S.; Solomon, R. A.; Blatt, A. Ebner; Dugan, William M.; Fouts, Paul J.; Hare, Laura; Kohlstaedt, Kenneth G.; Peirce, James D.; Westmoreland, Robert E., Indianapolis (Recent Advances in Pharmacology and Therapeutics) 799
Bryant, Richard D., Cincinnati (Toxemia of Pregnancy) 1018
Buchholz, Alexander M., Whiting (What Is the Best Treatment for Early Syphilis?) 1170
Carter, F.R.N., South Bend (A.M.A. Convention Notes) 837
Catlett, M. B., Fort Wayne (Surgical Conditions of the Gallbladder) 913
Cavins, A. W., Terre Haute (Exchange Transfusion for Erythroblastosis Fetalis) 214

Cockrum, William M., Evansville (Doctor Sensenich Assumes Presidency of American Medical Association) 835
Cockrum, William M.; Slaughter, Howard C.; Lynch, Harold D.; Austin, E. W., Evansville (Styes: The Role of Nutrition in Etiology and Treatment) 489
Coggeshall, L. T., Chicago (The Current Status of Influenzal Vaccines) 203
Cole, Arthur V., Indiana Harbor (General Treatment in the More Severe Type of Burns) 812
Covalt, Donald A., Washington, D. C. (The Medical Rehabilitation Service in the Veterans' Administration) 716
Crockett, F. S., Lafayette (What the American Medical Association is Doing About Rural Medicine) 726
Cuthbert, Marvin, Indianapolis (The Cross Cylinder in Refraction) 491
Dalton, William W., Indianapolis (Infectious Mononucleosis—A Review of the Disease) 1021
Damon, Samuel R.; Kuehn, Carl C., Indianapolis (Quantitative Serology and Syphilis) 318, 424, 513
Daubenheyer, M. F., Indianapolis (I. Q.) 427
Deever, John W., Indianapolis (Advantages and Disadvantages of General Practice in a Large City) 827
Dugan, William M.; Solomon, R. A.; Blatt, A. Ebner; Browning, James S.; Fouts, Paul J.; Hare, Laura; Kohlstaedt, Kenneth G.; Peirce, James D.; Westmoreland, Robert E., Indianapolis (Recent Advances in Pharmacology and Therapeutics) 799
Emswiller, Byron B.; Stump, Albert, Indianapolis (The Effect of Taxes on Your Estate Plans) 21
Evans, Mary Lou (Nurses—Community Safeguards) 425
Fairhall, Lawrence T., Washington, D. C. (Toxicology of the Heavy Metals) 917
Fitzsimmons, Elvin L., Evansville (Ambulatory Proctology) 707
Flanigan, M. B.; Moore, H. T., Indianapolis (Anesthesia for Chest Surgery) 913
Forster, N. K., Hammond (Medical Panorama) 88 and 229
Foshay, Lee, Cincinnati (Streptomycin in the Treatment of Tularemia) 207
Fouts, Paul J.; Solomon, R. A.; Blatt, A. Ebner; Browning, James S.; Dugan, William M.; Hare, Laura; Kohlstaedt, Kenneth G.; Peirce, James D.; Westmoreland, Robert E., Indianapolis (Recent Advances in Pharmacology and Therapeutics) 799
Gaddy, E. T., Indianapolis (Tonsillectomy—Pro and Con) 914
Gatch, W. D., Indianapolis (The Preservation of General Practice) 825
Gates, George E., Clinical Aspects of Gastric Malignancy 1166
Geiger, Dillon D., Bloomington (Private Patient—Clinician Plan of Indiana University School of Medicine) 1266
Giordano, A. S., South Bend (A.M.A. Committee to Study Practice of Medicine by Hospitals; Fellow Dues and J.A.M.A. Subscription Increased to Twelve Dollars) 224
Gorrell, Edmund C., Winamac (A Country Editor Appraises the Country Doctor) 833
Gosman, James; Thrasher, John B.; Bowman, George W., Indianapolis (A Second Report on Intrathecal Penicillin in Central Nervous System Syphilis) 216
Hagie, Franklin E., Richmond (Abdominal Pregnancy with Report of Two Cases) 305
Hall, Frank M., Indianapolis (Indiana Vocational Rehabilitation) 32
Hamlin, L. E., Chicago (Industrial Diseases of the Chest) 1013
Hare, Laura; Solomon, R. A.; Blatt, A. Ebner; Browning, James S.; Dugan, William M.; Fouts, Paul J.; Kohlstaedt, Kenneth G.; Peirce, James D.; Westmoreland, Robert E., Indianapolis (Recent Advances in Pharmacology and Therapeutics) 799
Harness, Forest A.; (The Federal Lobby for Socialized Medicine) 417
Harris, Harold J. (Brucellosis. A Resumé of Present Concepts [with special reference to the chronic illness]) 603
Hickman, W. R., Logansport (Periorbital Cellulitis: A Report of Four Cases) 501
Holinger, Paul H., Chicago (Nontuberculous Pulmonary Diseases: Their Relation to Bronchial Obstruction) 301
Jackson, J. W., Indianapolis (Immunization—The Doctors Responsibility) 402
Jay, Arthur N., Indianapolis (American Academy of General Practice and the Indiana Chapter) 735
Kaiser, Albert D., Rochester, New York (Virus Diseases in Children) 1250
Katterjohn, James C., Indianapolis (The Treatment of Hemangioma) 903
Keller, William K., Louisville (Observation) 1247
Kennedy, Walter U., New Castle (Progress of Mutual Medical Insurance, Inc.) 226
Kohlstaedt, Kenneth G.; Solomon, R. A.; Blatt, A. Ebner; Browning, James S.; Dugan, William M.; Fouts, Paul J.; Hare, Laura; Peirce, James D.; Westmoreland, Robert E.; Indianapolis (Recent Advances in Pharmacology and Therapeutics) 799
Kuehn, Carl C.; Damon, Samuel R., Indianapolis (Quantitative Serology and Syphilis) 318, 424 and 513
Larson, G. O., LaPorte (The LaPorte School Health Program) 1180
Lewin, Philip, Chicago (The Treatment of Infantile Paralysis During the Acute Stage) 908
Link, Goethe, Indianapolis (The Management and Treatment of Goiter) 814
Lynch, Harold D.; Cockrum, William M.; Slaughter, Howard C.; Austin, E. W., Evansville (Styes: The Role of Nutrition in Etiology and Treatment) 489
McCormick, C. O., Indianapolis (Planned Parenthood—The Road to National Health and World Peace) 81
McFarland, Corley B., South Bend (Vascular Changes of the Eye Associated with Diabetes Mellitus) 487
Mahoney, Charles L., Terre Haute (Headache) 496
Maple, James B., Sullivan (Advantages and Disadvantages of General Practice in a Rural Area) 828
Martz, Carl D., Indianapolis (Cerebral Palsy) 211
Masters, John B., Indianapolis (A Case of Arsenic Encephalopathy Successfully Treated with Bal) 1254
Meiling, Richard L., Columbus, Ohio (The Program of the Council on National Emergency Medical Service) 511
Middleton, William S., Madison, Wisconsin (The Medical Management of Thyrotoxicosis) 295
Miller, Maurine R., Indianapolis (The Vocational Needs of Prefrontal Lobotomy Patients) 1184
Miller, Roland, Lafayette (Colic in Infancy) 799
Moore, H. T.; Flanigan, M. B., Indianapolis (Anesthesia for Chest Surgery) 913
Mumford, E. B., Indianapolis (Fracture of the Shaft of the Femur) 599
Mumford, E. B.; Otten, Claude, Indianapolis (Novocain Injection Treatment of Metatarsal Fractures) 1169

Muntz, Hascall H.; Salkin, Irwin, Indianapolis (Rocky Mountain Spotted Fever in Indiana; Recent Advances in Therapy) 591
Nafe, Cleon A., Indianapolis:
(President's Address) 1161
(President's Page) 76, 222, 313, 412, 509, 619, 724, 820, 925, 1029, and 1265
Olson, Kenneth L., South Bend (The Cancer Program and the County Medical Society) 413
Otten, Claude; Mumford, E. B., Indianapolis (Novocain Injection Treatment of Metatarsal Fractures) 1169
Peck, Franklin B., Indianapolis:
(The Treatment of Diabetic Coma at Indianapolis General Hospital) 595
(Diabetes Detection) 1267
Peirce, James D.; Solomon, R. A.; Blatt, A. Ebner; Browning, James S.; Dugan, William M.; Fouts, Paul J.; Hare, Laura; Kohlstaedt, Kenneth G.; Westmoreland, Robert E., Indianapolis (Recent Advances in Pharmacology and Therapeutics) 799
Perry, Lester H., Harrisburg, Pennsylvania (The Dollars and Sense of Public Relations) 926
Powell, J. P., Marion; Battersby, J. S., Indianapolis; Bauer, Thomas B., Indianapolis (Rupture of the Jejunum and Ileum Due to Nonpenetrating Abdominal Trauma: Report of Five Cases) 1256
Ramsey, Frank B., Indianapolis:
(Surgical Aspects of Carcinoma of the Thyroid Gland) 395
(Medical Panorama) 321, 432, 518, 634, 738, 846, 942, 1030, 1188 and 1268
Reisler, Simon, Indianapolis (Subjectivity and Objectivity in Medicine and Surgery) 514
Rhea, J. C., Beech Grove (Medical Economics—A Personal Problem of Patient and Physician) 830
Rutherford, C. W., Indianapolis (Hemorrhages of the Retina; Newer Treatment) 494
Salkin, Irwin; Muntz, Hascall H., Indianapolis (Rocky Mountain Spotted Fever in Indiana; Recent Advances in Therapy) 591
Scuderi, Carlo, Chicago (Treatment of Long Bone Defects by Bone Grafts) 400
Sensenich, R. L., South Bend:
(The Program of the American Medical Association) 725
(Trends in Medicine) 77
Sicks, Okla W., Indianapolis (Mesenteric Adenitis of the Distal Ileum and Appendicitis) 807
Slaughter, Howard C.; Cockrum, William M.; Lynch, Harold D.; Austin, E. W., Evansville (Styes: The Role of Nutrition in Etiology and Treatment) 489
Smith, Ray E., Indianapolis (What's Going On In Indiana) 90, 230, 322, 433, 520, 636, 740, 850 and 948
Spurgeon, Orville E., Muncie (The Treatment of Asphyxia by Firemen) 307
Straus, David C., Michigan City (Vagus Nerve Resection (Vagatomy) in the Treatment of Acute Perforated Duodenal Ulcer. Report of a Case) 700
Stump, Albert; Emswiller, Byron B., Indianapolis (The Effect of Taxes on Your Estate Plans) 21
Thompson, Charles F., Indianapolis (Home Town Medical Care Program of the Veterans' Administration) 35
Thrasher, John B.; Gosman, James; Bowman, George W., Indianapolis (A Second Report on Intrathecal Penicillin in Central Nervous System Syphilis) 216
Tuohy, Edward B. (Anesthesia in Abdominal Surgery) 398
Urschel, Dan L., Mentone:
(Internal Medicine in a Rural Area) 831
(Recent Developments in the Treatment of Brucellosis) 695
Walls, Otto F., Indianapolis (Indiana's Licensed Nursing Homes) 25
Waterson, Rollen W., Oakland, California (Debunking Public Relations) 315
Wilcox, F. Shirley, Indianapolis (Federal Income Tax and the Medical Profession) 36

SPECIAL ARTICLES

A.M.A. Committee to Study Practice of Medicine by Hospitals; Fellow Dues and J.A.M.A. Subscription Increased to Twelve Dollars (Giordano) 224
A.M.A. Convention Notes (Carter) 837
American Medical Association, Doctor Sensenich Assumes Presidency of (Cockrum) 835
American Medical Association is Doing About Rural Medicine, What the (Crockett) 726
American Medical Association, The Program of the (Sensenich) 725
Annual Registration of License to Practice the Healing Art, New Law Requires 151
Army Doctors, New Professional Training Opportunity Offered 515
Associate Editor, Our New 314
Atomic Bomb Explosion, Mass Hysteria Need Not Follow 516
Atomic Bomb: What Every Medical Officer Should Know About the 620, 625, 629, 729, 732, 839, 842, 843, 933, 936
Auxiliary Officers, National and State 150
Brayton, Dermato-Syphilology Foundation Memorializes Dr. Alembert Winthrop 80
Cancer Bulletin, Indiana 314
Cancer Program and the County Medical Society, The (Olson) 413
Council on National Emergency Medical Service, The Program of the (Meiling) 511
Councilor Districts of the Indiana State Medical Association 152
Country Editor Appraises the Country Doctor, A (Gorrell) 833
County Medical Society, The Cancer Program and the (Olson) 413
Dermato-Syphilology Foundation Memorializes Dr. Alembert Winthrop Brayton 80
Diabetes Detection (Peck) 1267
General Practice and the Indiana Chapter, The American Academy of (Jay) 735
General Practice in a Large City, Advantages and Disadvantages of (Deever) 827
General Practice, The Preservation of (Gatch) 825
General Practice in a Rural Area, Advantages and Disadvantages of (Maple) 828
Hospital, The Scientific Organization of the (Berman) 821
Indiana University Medical School 152
Indiana University School of Medicine, Private Patient—Clinician Plan of (Geiger) 1266
Influenza, U. S. Public Health Service Report on 426
Internal Medicine in a Rural Area (Urschel) 831
I. Q. (Daubenheyer) 427
Lobotomy Patients, The Vocational Needs of Prefrontal (Miller) 1184
Medical Economics—A Personal Problem of Patient and Physician (Rhea) 830
Medical Panorama (Forster) 88 and 229
Medical Panorama (Ramsey) 321, 432, 518, 634, 738, 846, 942, 1030, 1188 and 1268
Medicine, Trends in (Sensenich) 77
Mutual Medical Insurance, Inc., Progress of (Kennedy) 226
Nurses—Community Safeguards (Evans) 425

Ophthalmia Neonatorum, Prophylaxis Against (Brother) ---------- 519
Planned Parenthood—The Road to National Health and World Peace (McCormick)-------- 81
President's Page (Nafe)--------76, 222, 313, 412, 509, 619, 724, 820, 925, 1029 and 1265
Private Patient—Clinician Plan of Indiana University School of Medicine (Geiger)----------1266
Public Relations, Debunking (Waterson)------ 315
Public Relations, The Dollars and Sense of (Perry) ---------- 926
Quantitative Serology and Syphilis (Kuehn, Damon) ----------318, 424, 513
Rural Area, Internal Medicine in a (Urschel)-- 831
Rural Medicine, What the American Medical Association is Doing About (Crockett)------ 726
School Health Conference A Success, First------1175
School Health Program, The LaPorte (Larson)--1180
Secretaries' Conference Program---------- 223
Sensenich Assumes Presidency of American Medical Association, Doctor (Cockrum)------ 835
Socialized Medicine, The Federal Lobby for (Harness) ---------- 417
Subjectivity and Objectivity in Medicine and Surgery (Reisler)---------- 514
Vocational Needs of Prefrontal Lobotomy Patients, The (Miller)----------1184
Voice of Medicine----------320 and 430
What's Going On in Indiana (Smith)-----90, 230, 322, 433, 520, 636, 740, 850 and 948

DEATHS

Alburger, Henry R., Indianapolis----------1202
Aldrich, Harry, Fort Wayne ----------1280
Alexander, William P., Gary---------- 238
Allenbaugh, Arleigh E., Evansville---------- 530
Allenbaugh, Elmer E., Dale---------- 858
Arnold, Ralph Nordock, Greenfield----------1280
Barnes, William E., Evansville---------- 750
Beard, Paul H., Indianapolis---------- 238
Benham, James W., Columbus---------- 858
Boone, John C., South Bend---------- 326
Bounell, Emery G., Hillsboro---------- 442
Boyd-Snee, Harry, South Bend---------- 962
Braginton, Fred, Hammond----------1112
Brink, John C., Gary---------- 238
Brown, Harry Merrill, Indianapolis---------- 858
Bruner, Charles H., Greenfield---------- 92
Chandler, Joseph S., Jr., Muncie---------- 530
Chapin, Charles C., LaFayette---------- 442
Christie, J. Preston, North Madison---------- 750
Clark, Carl M., Oakland City---------- 530
Conkling, Clifford W., Windfall---------- 326
Copeland, Charles C., North Madison---------- 92
Crane, Albert L., Evansville---------- 92
Davisson, Carl V., Williamport---------- 644
Deen, Henry H., Leavenworth---------- 750
Derian, Mardiros H., Gary ----------1280
English, Calvin H., Fort Wayne---------- 326
Fagaly, Arthur T., Lawrenceburg---------- 326
French, Virgil W., Riley---------- 326
Giorgi, Antonio, Gary---------- 962
Goodale, Albert W., Orland----------1202
Goss, Herschell W., Indianapolis---------- 750
Graham, Alois B., Pittsburg, Pa.---------- 530
Graham, Cova R., Bourbon---------- 644
Graham, Henry J., Mishawaka---------- 442
Hadley, Alfred W., Indianapolis---------- 326
Hamilton, Eugene E., Dayton---------- 442
Hines, Dorsey M., Auburn---------- 442
Holt, Earl K., Harding, Massachusetts----------1280
Hoppes, Gilbert A., Anderson----------1280
Hunt, William B., Terre Haute---------- 962
Inlow, C. Fred, Shelbyville---------- 442
Ish, Ethan A., Waterloo---------- 92
Jenkins, James N., Cortland---------- 858
Jones, Rilus E., Los Angeles, Calif.---------- 238
Karras, George L., Gary----------1202
King, Jack A. C., Vevay---------- 238
King, Richard Franklin, Jamestown----------1112
Kraft, Ralph William, Hobart---------- 858
Lake, George N., Pleasant Lake---------- 92
Landis, William Carle, Claypool----------1280
Lilly, Josiah Kirby, Indianapolis---------- 326
Little, Edward O., Danville---------- 92
Lohman, Maurice R., Fort Wayne---------- 644
Loomis, John F., Marion---------- 530
McBride, Earle C., Terre Haute---------- 750
McKay, James D., Marion---------- 442
McNaull, Charles M., Indianapolis---------- 750
McPherson, Solomon L., Washington---------- 238
Mace, Elmer E., New Palestine---------- 858
Mitchell, Harry F., South Bend---------- 238
Morrison, James H., Hartsville---------- 858
Mount, William C., Kirklin---------- 92
Ostrowski, Leonard J., East Chicago---------- 644
Otto, Anthony E., Alexandria---------- 750
Pettigrew, Charles D., Muncie----------1280
Ramsay, John P., Vincennes---------- 326
Reed, Lewis DeWitt, Hope----------1280
Rendel, C. F., Mexico----------1112
Reynolds, Francis M., Montpelier---------- 644
Riley, Eden Thompson, Greensburg---------- 962
Royster, Hollace Rector, Frankfort----------1112
Shannon, Rollin Robb, Williamsport---------- 962
Slabaugh, Lotus M., Nappanee---------- 750
Small, Emery F., Vincennes---------- 92
Smith, H. Brooks, Bluffton----------1280
Stalker, James B., Indianapolis---------- 858
Stauffer, Horace R., Nappanee---------- 962
Stephenson, Chester Elwood, Indianapolis------1202
Swarts, Willard W., Three Rivers, Mich.--------- 644
Tavenner, F. W., Gas City---------- 962
Taylor, Daniel E., Velpen----------1280
Teague, Mabel M., Indianapolis---------- 326
Thomas, Clarkson B., Plainfield---------- 530
Wagner, Samuel Charles, Elkhart---------- 962
Walkinshaw, William, Stilwell---------- 530
Walters, Lindsay, Muncie---------- 238
Westhafer, Edison Kerl, New Castle----------1280
Wheat, Wallace W., Roseville----------1112
Wilson, John R., Terre Haute---------- 92
Wishard, Frederick Bryan, Anderson----------1202
Wray, Curtis M., Lafayette---------- 530
Wright, Walter W., New Castle---------- 858
Woods, William V., Indianapolis---------- 750
Zimmerman, Russell G., Berne----------1202

BOOKS

(Acknowledged and reviewed)

Authors

Adler, Francis H. (Giffords Textbook of Opthalmology) ---------- 250
Ballenger, William Lincoln, Howard Charles, and John Jacob (Diseases of the Nose, Throat, and Ear) ---------- 250
Bastedo, Walter A. (Pharmacology Therapeutics and Prescription Writing)---------- 250
Beckman, Harry (Treatment in General Practice) ---------- 632 and 1118
Bergler, Edmund (Battle of the Conscience)---- 632
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Cole, Warren H.; Elman, Robert (Textbook of General Surgery) 760
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Crossen, Harry Sturgeon, and Robert James (Operative Gynecology) 632
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Cutting, Windsor C. (A Manual of Clinical Therapeutics) 632
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Harry, Ralph G. (Modern Cosmeticology) 633
Hirsch, Edwin W. (Sex Power in Marriage) 250
Ilgenfritz, Hugh C. (Preoperative and Postoperative Care of Surgical Patients) 1208
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Committee on Medical Research (Advances in Military Medicine) 632
Long, Perrin H. (A-B-C's of Sulfonamide and Antibiotic Therapy) 1208
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McDonald, Joseph J.; Chusid, Joseph G.; Lange, Jack (Correlative Neuroanatomy) 870
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Moench, Louis G. (Headache) 250
Morehouse, Laurence E.; Miller, Augustus T., Jr. (Physiology of Exercise) 760
Muncie, Wendell (Psychobiology and Psychiatry) 633
Nichols, John Benjamin; Mallory, William Johnston; Wall, Joseph Stiles (History of the Medical Society of the District of Columbia) 760
Novak, Emil (Textbook of Gynecology) 633
Noyes, Arthur P. (Modern Clinical Psychiatry) 978
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Rodale, J. I. (The Healthy Hunzas) 870
Rosen, George (400 Years of a Doctor's Life) 760
Rugin, Eli H. (Diseases of the Chest: With Emphasis on X-ray Diagnosis) 356
Shands, Alfred Rives, Jr.; Raney, Richard Beverly (Handbook of Orthopaedic Surgery) 1208
Slavson, S. R. (The Practice of Group Therapy) 632
Soilman, Torald (A Manual of Pharmacology) 633
Stilwell, George Giles; Todd, James Campbell (Clinical Diagnosis by Laboratory Methods) 633 and 978
Titus, Paul (The Management of Obstetric Difficulties) 356
Todd, James Campbell; Stilwell, George Giles (Clinical Diagnosis by Laboratory Methods) 633 and 978
Turner, C. Donell (General Endocrinology) 978
Vaughan, Warren T.; Black, J. Harvey (Practice of Allergy) 978
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Watson, Leigh F. (Hernia) 632 and 1118
Wechsler, Israel S. (A Textbook of Clinical Neurology) 250
White, Benjamin V.; Geschicter, Charles F. (Diagnosis in Daily Practice) 356
Willis, Frederick A.; Dry, Thomas J. (A History of the Heart and the Circulation) 870

Subjects

(r-book reviewed)

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Clinical Diagnosis by Laboratory Methods (Todd, Stilwell) W. B. Saunders Company (r) 633 and 978
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Diagnosis in Daily Practice (White, Geschicter) J. B. Lippincott Company (r) 356
Ear, Diseases of the Nose, Throat and (Ballenger, Ballenger, Ballenger) Lea & Febiger 250
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Licensure Examinations, Rypins' Medical (Bierring) J. B. Lippincott Company---- 250
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Occupational Medicine and Industrial Hygiene (Johnstone) C. V. Mosby Company (r) ---- 633 and 1118
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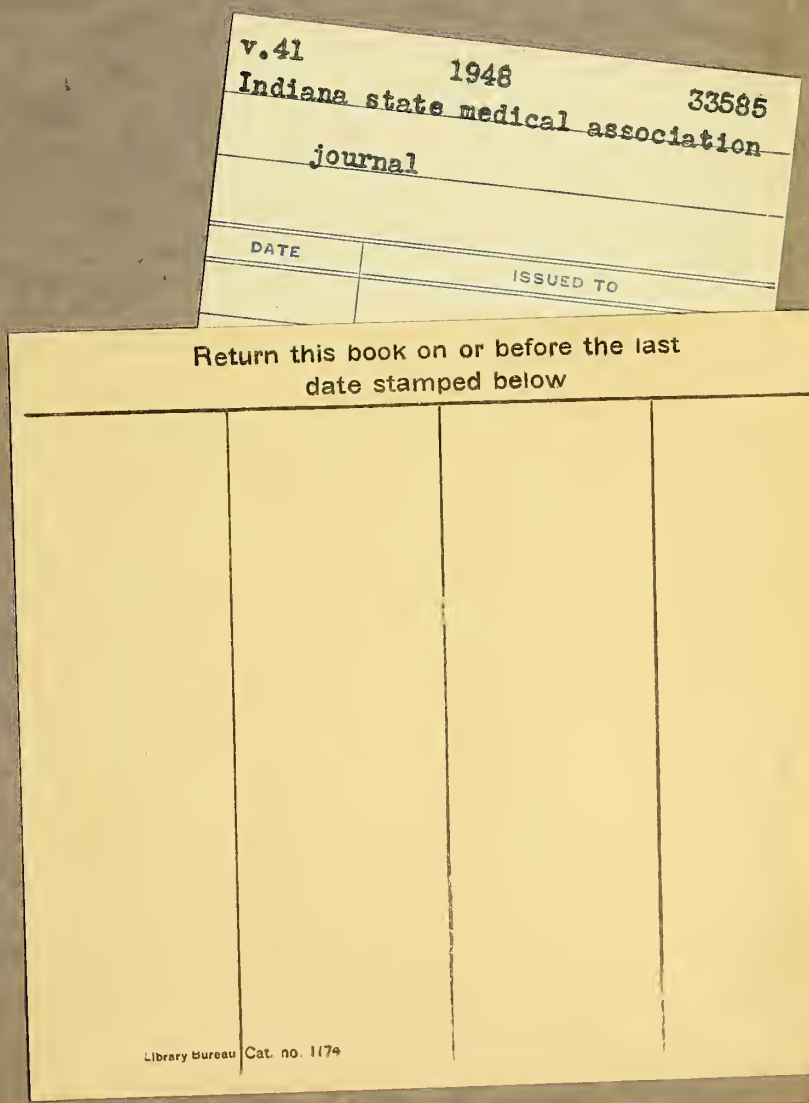
SOCIETY REPORTS

Indiana State Medical Association:
Council ----328, 536, 964, 1281 and 1284
First ---- 752
Councilor District Meetings:
Second ---- 754
Third ---- 754
Fourth ---- 754
Fifth ---- 754
Sixth ---- 650
Seventh ---- 100 and 1206
Ninth ---- 650
Tenth ----652 and 1312
Eleventh ----1206
Twelfth ---- 550
Crippled Children's Services, Committee on---- 652
Executive Committee--240, 344, 444, 546, 646, 863, 974, 1114, 1202 and 1308
House of Delegates; Members of----1085
Official Call to the----1047
Reports of ----1284 and 1294
Local Societies—Officers---- 242, 350, and 446
Local Societies—Reports----100, 246, 350, 448, 550, 654, 756, 868, 1116, 1206 and 1312
Officers and Committees, Reports of ----1048
Publicity, Bureau of---- 100, 242
Publicity, Committee on---- 348, 446, 550, 648, 650, 752, 866, 976, 1116, 1204, 1206 and 1310
Woman's Auxiliary to the Indiana State Medical Association --248, 354, 448, 656, 758, 868, 1116 and 1314
Women's Entertainment ----1040

MISCELLANEOUS

Convention Program---- 994
Exhibitors ----1088
Indiana Health Officers' Conference----1043
Indiana State Board of Health — Division of Communicable Disease Control--252, 554, 556, 674, 778, 882, 1212 and
Instructional Courses---742, 970, 952 and 1045
Membership Roster:
Alphabetically ---- 113
By Counties ---- 129
Woman's Auxiliary ---- 144
News Notes---94, 232, 323, 434, 522, 638, 746, 852, 954, 1102, 1190 and 1277
Presidents of the Indiana State Medical Association Since Its Organization, List of--58 and 1042
Reference Committees ----1048
Scientific Exhibit ----1041

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